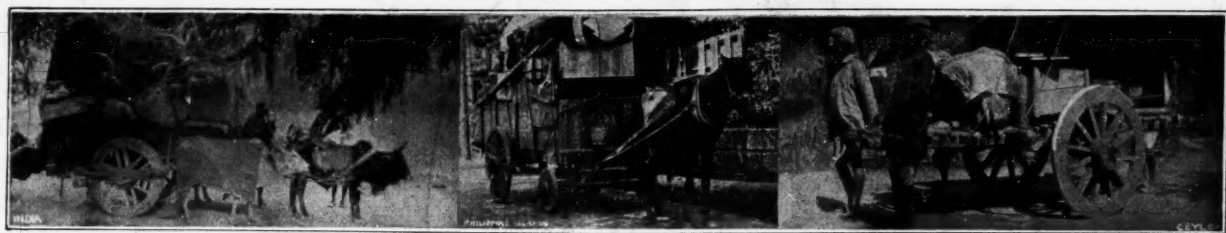


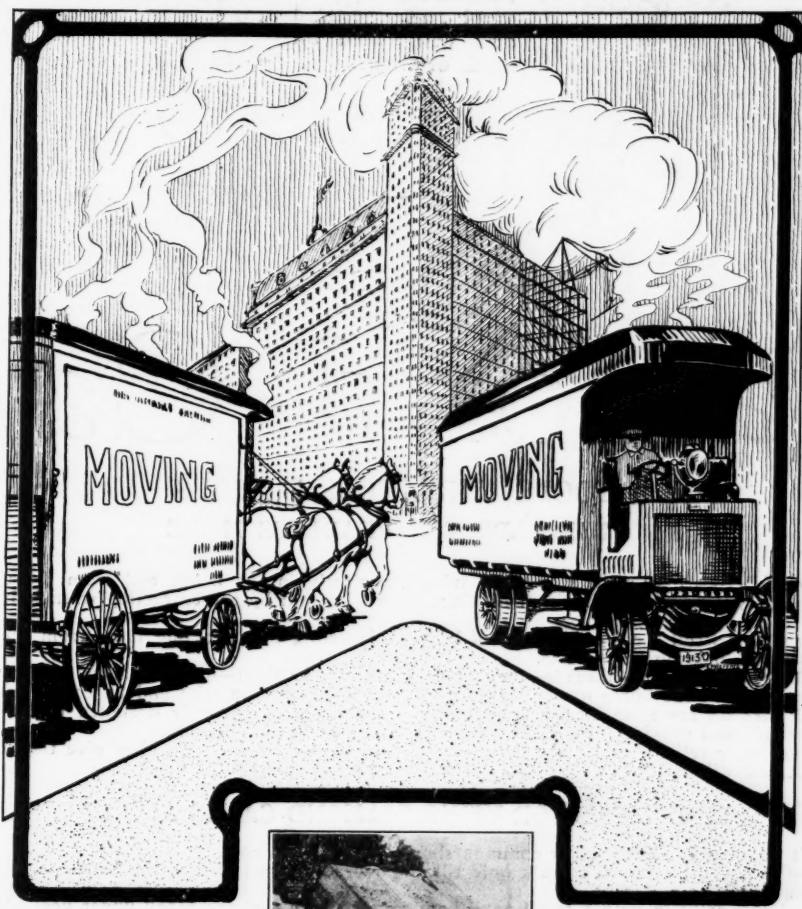
THE TEAM OWNERS REVIEW

DECEMBER, 1913.

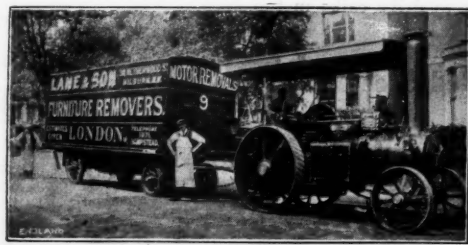
VOL. XII., NO. 12



Fight Begun in
Philadelphia
for
Country-Wide
Tail-Board
Delivery.
Page 2.



Indianapolis
Team
Owners
Have Their
Taste of
Labor War.
Page 6.



Western Office:
Chicago, Ill.
1461 Monadnock Bldg.

Published at
Pittsburgh, Pa.
417 Westinghouse Building.

New England Office:
Boston, Mass.,
79 Portland Street.

THE TEAM OWNERS REVIEW



DIAMOND HORSE SHOES

Diamond Calks

TOOLS AND HORSE SHOES
THE OLDEST THREADLESS MADE

DIAMOND CALKS are so made that the shanks fit perfectly in the holes, and from the time they are first placed in the shoe they remain securely in their place until lifted out by the extracting wrench and a new calk or a set of calks inserted.

DIAMOND CALKS call for the minimum of labor in inserting or extracting them from the holes in shoes. No broken knuckles when using these calks.

DIAMOND CALKS have no threads—they fit tightly and stay tight—no lost calks. No lost time when using them. When once adopted the horse owner wants no other. Give them a trial and be convinced.

DIAMOND CALKS are scientifically tempered, and are made of specially designed tooled steel to meet the most extreme demands and provide for the severest tests that may be given them.

They are absolutely reliable under the most treacherous winter conditions. They give the horse secure footing on icy pavements, and will **POSITIVELY OUTWEAR** any other calk on the market.

DIRECTIONS FOR USING DIAMOND CALKS AND SHOES

FIRST—Fit shoes same as any other common shoes and let them cool.

SECOND—Oil and drive punch in calk hole till shoulder on punch strikes the shoe.

THIRD—Nail on shoe and clinch.

FOURTH—Drive calks in with a small anvil hammer and hold a clinch block under heel of shoe while setting the heel calks. Two or three blows on each calk is plenty. Don't attempt to drive calks in too deep.

TO REMOVE—Drive extractor under the blade.

Send for our beautiful Art Calendar—Mailed Free on Request!

Diamond Calk Horse Shoe Co.

DULUTH, MINNESOTA.

PLEASE MENTION THE TEAM OWNERS' REVIEW, WHEN WRITING TO ADVERTISERS.

TEAM OWNERS REVIEW

Entered as Second-Class Matter in the Pittsburgh Post Office.

Volume XII.

PITTSBURGH, PA., DECEMBER, 1913.

No. 12.

THE TEAM OWNERS REVIEW

OFFICIAL PUBLICATION OF
THE NATIONAL TEAM OWNERS ASSOCIATION
AND
AMERICAN TRANSFERMEN'S ASSOCIATION.

PUBLISHED ONCE A MONTH

AT
417 WESTINGHOUSE BUILDING.

Telephone: Bell, Grant 2729.

PITTSBURGH, PA.

THE CONSOLIDATED PUBLISHING COMPANY, Inc.

L. L. CARSON - - - - - PRESIDENT
WALTER A. YOUNG - - - - - VICE PRESIDENT-SECRETARY
WILL R. MCCORD - - - - - EDITOR
W. D. QUIMBY - - - - - NEW ENGLAND REPRESENTATIVE
79 Portland Street, Boston.

THE NATIONAL TEAM OWNERS' ASSOCIATION.

Officers:

W. H. FAY, Cleveland, O. President
D. A. MOOR, Kansas City, Mo. 1st Vice President
N. F. RATTY, Chicago, Ill. 2nd Vice President
W. J. McDEVITT, Cincinnati, Ohio. Treasurer
THEODORE GABRYLEWITZ, Philadelphia, Pa. Secretary

AMERICAN TRANSFERMEN'S ASSOCIATION.

Officers:

H. F. CHESTER, Champaign, Ill. President
JESSE O. WELLS, Des Moines, Iowa. 1st Vice President
J. C. SHARPE, Omaha, Neb. 2nd Vice President
C. M. SIMON, Sr., Little Rock, Ark. 3rd Vice President
E. M. HANSEN, St. Joseph, Mo. Secretary and Treasurer

TERMS OF SUBSCRIPTION.

In the United States or Dominion of Canada, \$1.00 per year,
which is payable in advance.
To Foreign Countries, \$1.50 per year.

* * * *

The Team Owners Review is published in the interest of the men and companies who are engaged in what may be comprehensively called "the Trade of Teaming," to which belong Transfer, Warehouse and Express Companies, Truckmen, Carters, Hauling Companies, Livery Stable Owners, etc., etc.

If you wish your address changed, be sure to give the old as well as the new address.

ADVERTISING.

Card of rates sent promptly on application.

Orders for new advertising, or changes intended, should reach this office not later than 15th of month previous to date of publication, to insure insertion in the next number.

CONTENTS OF THIS ISSUE.

| | |
|--|----|
| National Team Owners' Association Begins Fight Before Interstate Commerce Commission to Secure Tail-Board Delivery at City Terminals | 2 |
| Among the Associations | 5 |
| Indianapolis' Teamsters on Strike | 6 |
| Stable and Harness Hints | 8 |
| New England News | 9 |
| Nervousness in Horses: Why It Is Decreasing | 10 |
| Veterinary Vaccines: A Government Bulletin | 11 |
| MOTOR TRUCK OWNERS' REVIEW— | |
| "The Motor Truck for Your Job": A Compilation of Truck Capacities and Prices (From "Scientific American") | 16 |
| Notes of the Auto Truck Field | 19 |

The Team Owners Review wishes all its patrons and friends a very jolly Christmas and a contented and prosperous New Year.

Opening a Hard Battle for Tailboard Delivery.

ELSEWHERE in this issue we tell our readers the story of the firing of the opening gun, at Philadelphia, in the fight taken up by the National Team Owners' Association for tailboard delivery of freight to teamsters in the railroad terminals of the great cities of the country.

The Interstate Commerce Commission is a safe, sane and unhurried body. The teaming interests of the country may depend on getting a fair hearing, and we must not be impatient if the ways of the commission seem the opposite of haste. We have everything to gain in a full, free hearing; the railroads have everything to lose.

Meantime, too much credit cannot be given President Fay and Secretary Gabrylewitz for the exhaustive study they have made of the subject, and the unselfish manner in which they have given their time to the preliminaries. Whatever victories are won will be chiefly due to the devotion of those two faithful officers to the cause.

Pittsburgh in the Fold.

PITTSBURGH'S team owners came into the fold last month. In other words, the Allegheny County Team Owners' Association decided to affiliate with the National Team Owners' Association.

It is a happy culmination of the situation created at the National convention of the Association at Minneapolis last July, when the National Association accepted the invitation to hold the 1914 convention in Pittsburgh. Happy, we repeat, for three reasons: First, this addition of the strong Pittsburgh association strengthens the National organization; second, Pittsburgh's association is strengthened by having the backing of the teaming organization of the country; and third, it was the one thing necessary to insure a whoppingly successful National convention next year.

Now, everybody, pull for the 1914 convention!

National Team Owners' Association Begins Fight for Country-Wide Tailboard Delivery.

THE fight by the National Team Owners' Association before the Interstate Commerce Commission asking for reforms in deliveries of inbound freight in upwards of 60 cities of the country, reached an issue during the closing days of November, in a hearing before Interstate Commerce Commission Examiner Pattison, at the Federal building, Philadelphia.

The hearing of testimony closed in Philadelphia on December 6, and Examiner Pattison announced that dates for filing briefs and hearings of oral arguments would be announced later.

The case before the Interstate Commerce Commission is the logical outcome of the agitation begun more than a year ago by the Philadelphia Team Owners' Protective Association in a demand for tail-board delivery and other concessions of the trunk line railroads centering on Philadelphia. The case was heard before the Pennsylvania State Railroad Commission last spring and the Philadelphia team owners secured a partial victory, though numerous cases of discrimination charged against the Philadelphia terminals were not acted on, and tailboard delivery was not made compulsory at all terminals.

However, Philadelphia had made a start in the campaign, and had collected a vast amount of data bearing on the case. At the Minneapolis convention of the National Team Owners' Association, last July, the National body voted to take up the Philadelphia fight, and carry it to the Interstate body. Fortunately, a vacancy in the National secretaryship was filled by the election of Theodore Gabrylewitz, of the Philadelphia Association, who had been practically in charge of the Philadelphia fight and hence brought to his new position with the National Association all his knowledge of the intricacies of the delivery question gained in the preparation of the case before the State Commission.

National Officers Work Under Cover.

There followed two months of hard work, under cover, by National President W. H. Fay, of Cleveland, and National Secretary Gabrylewitz. These two officials, during August and September, visited more than 50 cities, and quietly inspected railroad terminal conditions, gathering evidence and securing names of witnesses. All this work had to be done without any publicity, since the railroads were constantly seeking to block their efforts.

It was not until November 10 that the results of the months of detail work were made known by Secretary

Gabrylewitz, at Philadelphia, and the petition of the National Team Owners' Association (entered in the name of the Philadelphia Team Owners' Protective Association) was announced. President Fay arrived in Philadelphia on November 20, and the hearings continued, with short intermissions, from November 25 till December 6.

Notice of separate petitions from Team Owners' Associations in 60 cities of the United States was given with the filing of the Philadelphia petition, affecting every city under the jurisdiction of the National Team Owners' Association in which tailroad delivery is not in vogue. Among the 60 cities acting against the railroads, besides Philadelphia, are New York, Chicago, Pittsburgh, St. Louis, Cleveland, Buffalo, Cincinnati, Milwaukee, San Francisco, Kansas City, Columbus, Toledo, St. Paul, Minneapolis, Detroit, Scranton, Trenton and Camden. The Team Owners' Associations in these towns use 350,000 horses and 4,000 auto trucks. They say their loss through lack of tailboard delivery is \$1,000,000 a year in time alone. The railroads eventually to be named as defendants will include virtually every trunk line transportation interest in the United States east of the Mississippi, and a number west. Cities where tailboard delivery already is required include Chicago, Detroit, St. Paul, Buffalo and Cleveland.

One of the main complaints in the general petition, brought under the name of the Philadelphia Association, was that certain regulations for terminal stations that had been recommended by the Pennsylvania State Railroad Commission in the case of the Philadelphia terminals, following the State hearings last spring, had been altogether ignored by the railroads entering Philadelphia—the three roads involved being the Pennsylvania, the Philadelphia & Reading, and the Baltimore & Ohio. At the opening of the hearing National Secretary Gabrylewitz made the statement:

When you compare the methods of the progressive western cities and the manner in which they are doing business, and then compare them with the inadequate stations of Philadelphia, you could hardly credit the conditions.

Charges in Present Case.

A summary of the charges against the railroads as set forth in the Philadelphia petition and copied in all the others is as follows:

That the respondents do not perform at the city and port of Philadelphia their full functions as common

carriers of freight for which they charge and receive a fixed tariff, in that:

(a)—Respondents do not deliver goods at the station named as destination in the bill of lading, but instead only unship goods at such station.

(b)—Respondents do not furnish reasonable facilities and suitable and convenient appliances at their respective stations and terminals to enable consignees and their agents and servants to remove their goods.

(c)—Respondents do not separate, segregate or make accessible for inspection to consignees or their agents and servants the merchandise carried to and unshipped in their terminals.

(d)—Respondents do not furnish stations with adequate floor space to accommodate inbound and outbound commerce, so that inevitable congestion results and there is a great hindrance to the free movement of commerce.

(e)—Respondents compel and require petitioners, their servants and agents to go into respondents' respective terminals, and without material aid, to search for, find and remove their merchandise from under and over piles of freight marked for other consignees.

(f)—Respondents' system of piling freight results in breakage of many fragile articles, for which breakage you petitioners as individuals are compelled to pay.

(g)—Respondents permit, and in some instances require, that inbound and outbound merchandise be received at the same doors of stations, with the resulting conglomeration of goods, confusion of consignment clerks and delay to petitioners, and this is especially true where the two movements are simultaneous.

(h)—Respondents discriminate between petitioners to whom they deny tailboard delivery, and certain consignees to whom they afford tailboard delivery.

The Philadelphia teamsters, in their individual petition charged that the railroad freight stations in every instance are inadequate to handle the freight brought into them. They declared that freight is dumped from cars in huge piles without any regard for its size or nature. Teamsters, when they go to the freight stations to get freight, are obliged to go through huge heaps of disordered freight to find what they are after. The railroad employees offer them no assistance. They are forced to find their freight and haul it to the platform, so that it may be loaded on the wagons. Frequently they cannot find their consignment because it is buried under heaps of other freight which cannot be moved.

On the other hand, the teamsters charged, big consignees are favored in every way by the railroads. Their freight is arranged in orderly piles on the edge of the platform, so that it can be taken easily into wagons. Much of the favored freight is placed directly in the way of the smaller consignments, so that teamsters coming after the smaller goods are unable to load even if they find their freight.

Philadelphia also included the steamship freight terminals in its charges.

Hearings in Other Cities.

Following the Philadelphia hearing, the Interstate Commerce Commission will hold separate hearings in

each of the 60 cities making a complaint. It is expected that it will be six months before all the testimony is in.

At these hearings, the teamsters will insist continually on their position that in certain cities where general tailboard delivery already is established freight congestion virtually is unknown.

The defendants named by the Philadelphia Association in their petition include the following:

Philadelphia & Reading Railway Company, Pennsylvania Railroad Company, Baltimore & Ohio Railroad Company, Schuylkill East Side Railroad Company, Philadelphia, Baltimore & Washington Railroad Company, International Mercantile Marine Company, Hamburg-American Packet Company, North German Lloyd, Holland-America Line, Scandinavian-American Steamship Company, United Fruit Company, Furness, Withy & Company, Italia Societa di Navigazione a Vapore, La Veloce Navigazione Italiana a Vapore, Navigazione Generale Italiana, Manchester Lines Limited, Cuneo Importing Company, Merchants & Miners' Transportation Company, Clyde Steamship Company, Southern Steamship Company, Philadelphia & New Orleans Steamship Company, Baltimore & Philadelphia Steamboat Company (Ericsson Line).

How the Case Stands in Philadelphia.

Following is the remarkably clear exposition of the case of the team owners, as set forth in the Philadelphia petition:

Petitioners aver that the method whereby package freight and merchandise arriving in less than carload lots is obtained at the respective terminals of the respondents is substantially as follows:

At or before the arrival of the "freight," notice is sent by the carriers' agents, they having received information of the arrival from a waybill, to the consignee. The consignee then notifies the teamster whom he employs. The driver takes this notice and repairs to the freight station at which the merchandise is said to be. He leaves his team at the nearest point to the station possible and goes on foot to the station office, stands in line with the other drivers and waits his turn at the cashier's or clerk's window. On arriving at the window he presents his notice. The clerk takes the notice and searches through his pile of freight bills to ascertain whether the merchandise indicated in the notice has arrived. Often the merchandise specified has not arrived, and then the driver must return empty handed. If the merchandise has arrived the clerk gives the driver a slip indicating in what section or part of the station the merchandise sought is supposed to be. The driver then returns to his team, backs his wagon up to the nearest possible doorway to the section indicated on the aforesaid slip. He then enters the station, searches for the packages indicated on his slip, first in that section indicated on the aforesaid slip, but if he is unable to find the packages there he extends his search through the mass of merchandise piled in other parts of the said station, and when successful in his quest, he clears a gangway to the door of the station (sometimes, though infrequently aid is given for this purpose), where he left his wagon, searches for and finds a hand truck, or waits until another driver is through with the hand truck,

trucks the packages to the tailboard of his wagon, loads them and departs. * * * *

That the respondents respectively maintain freight stations in the city and port of Philadelphia which cover in extent from one to five acres; that the merchandise is placed by the agents and servants of the respondents in the said respective stations in a heterogeneous mass and piled frequently without longitudinal or transverse aisles; that where there are such aisles they are frequently of insufficient width to permit the passage of a loaded hand truck; that fragile articles such as glassware are intermingled with iron pipe and castings; oil, with carpet, rags, wool, cotton and other inflammable materials and beer in barrels with furniture and machinery; that goods of one merchant are intermingled with the goods of another merchant; that the goods of one merchant are super-imposed upon the goods of another merchant; that boxes and bales and bundles are dumped together by respondents when unloading from car into station without attention as to whether the marks are visible or turned down; that parts of consignments arriving together are frequently separated by the careless handling of respondents, their agents and servants, and so promiscuously scattered about as to be reported lost; that at the expiration of four days' free time, the said lost goods are put in storage houses owned by respondents, and consignees are compelled to pay unloading and storage charges thereon, and that drivers are frequently compelled to go into cars on track to obtain miscellaneous goods in less than carload lots for miscellaneous consignees.

That certain consignees are favored in that they have their inbound merchandise piled by the respondents, their agents and servants, at the doorways or entrances of the respective stations, making the merchandise thus received immediately available to the consignees so favored; that the petitioners cannot obtain their goods without climbing over the mass of goods of the said favored consignees, which results in great delay and loss of time to the respective members of the Association petitioner and to the other petitioners; and that the said favored consignees are further favored by the respondents, in that respondents, their agents and servants, truck and carry inbound merchandise consigned to the said favored consignees to the tailboard of the wagons of the said favored consignees and frequently aid the drivers thereof to load the said merchandise.

The Philadelphia Hearings.

At the hearings in Philadelphia, detailed data was submitted showing time lost by consignees and their teaming representatives in getting freight from terminals. Following this, time-keepers employed by the Philadelphia Team Owners' Association testified that wagons of certain stores have been given every facility and have even been loaded by railroad employes, while regular teamsters were forced to hunt out their own consignments, make a way to carry them to their wagons and load them without aid.

The timekeepers were R. C. Cosgrove and B. H. Thompson. They were employed by the Team Owners' Association to go to the various piers and watch the loading of wagons. They testified that they had witnessed the employes of steamships and railroads aiding

employes of the big stores while other teamsters were given no assistance while in search of consignments. The testimony of the two men covered the month of November, and it was brought out that the teamsters are delayed as long as an hour and a half locating and loading goods at the different railroad stations and piers.

The testimony also developed that the railroads had hurriedly tried to institute reforms at some of the Philadelphia terminals when they learned the team owners were taking the case to the Interstate Commerce Commission. The position of the National Association on this feature of the case is that the Interstate Commission must make its orders based on the old conditions, on the assumption that if no orders are made the railroads will return to the old conditions the minute they are not under fire. John A. Clark, a team owner, testified that prior to reforms instituted at the Pennsylvania stations in the last three months, it often took days to locate shipments. H. C. Moore, another team owner, testified that it was possible to get freight from the pier of the Merchants' & Miners' steamship line in a third of the time required at the average station of the Pennsylvania Railroad. He also said there was confusion and lack of system at the Thirteenth and Calowhill streets station of the Reading. Once in a while, he asserted, there had been a conference between railroad officials and team owners, but it resulted in only a temporary improvement.

Favoring Big Interests.

Certain department stores and large team owners are favored by the railroads in the disposition of their freight, according to the testimony of Daniel Casey, a Philadelphia teamster employed by H. C. Moore. Their goods, he said, were piled in convenient places, where they could be loaded to wagons without delay.

C. A. Witzel, of Cleveland, supervisor of transportation of the Baltimore & Ohio, put up a long face when called to testify to the efficiency of tailboard delivery in Cleveland. "Although tailboard delivery as practiced in Cleveland is efficient in the handling of freight," he said, "it increases the cost by 10 cents a ton. If used in many freight stations of the long and narrow type the trucking incident to its operation would cause delay and congestion that would speedily lead to its abandonment. One of the main arguments against giving tailboard delivery to Philadelphia is that such an action would oblige the railroad to do the same in every city and town down to country stations. Tailboard delivery in Cleveland, by excluding teamsters from the freight stations, did not stop pilfering, as has been testified, but actually tended to increase it. At the present time railroads do half their freight business at a loss. The cost of installing general tailboard delivery on the road would be ruinous."

Mr. Witzel admitted, on cross-examination, that

tailboard delivery is the quickest and most efficient method of handling freight from the viewpoint of the team owners, but is too expensive for general use.

"It costs from eight to 18 cents a ton to handle freight in this way," the witness said, "and no railroad could afford to install this system at all its freight stations."

Mr. Witzel had no answer to the question of why the railroads continued the service in Cleveland in the face of the arguments he had against it.

J. C. Gilmore, Pennsylvania freight agent at Broad street and Washington avenue, Philadelphia, testified that tailboard delivery would not facilitate movement of freight. He said that the inauguration of the tailboard delivery system would mean an additional expense to his office alone of \$36,000 annually.

Examiner Pattison said at the close of the hearing that dates for filing briefs and hearings of oral arguments would be announced later.

Illinois Furniture Warehousemen.

The September and October issues of the monthly proceedings of the Illinois Furniture Warehousemen's Association have been received. It is published by the publication committee with R. J. Wood, chairman; F. L. Bateman and M. H. Kennelly. The announcement of the publication said:

"It is the desire of the Illinois Furniture Warehousemen's Association in issuing this monthly publication to furnish its members with a journal which will not only give the proceedings of the regular monthly meeting and the discussions pertaining thereto, but will provide a medium for the interchange of ideas and the publication of various items of interest to the warehouseman. It is hoped that the members will send to the secretary any news items, questions, building notes, legal matters, etc., which will be of interest to the warehousing industry."

American Warehousemen's Association.

The Twenty-third Annual Convention of the American Warehousemen's Association was held at the Hotel Dennis, Atlantic City, N. J., December 3, 4, and 5, 1913. The program was as follows:

First day—Reports of officers, committees, etc.

Second day—Household goods section and cold storage section.

Third day—General merchandise section and unfinished business.

The secretary of the Association is C. L. Criss, Liberty and Second avenue, Pittsburgh.

Whenever it is cold enough for a man to wear an overcoat it is cold enough to blanket the horse, says the "National Harness Review."

Among the Associations.

St. Louis.

The St. Louis Team Owners' Association has completed all arrangements for its twenty-second annual ball, which will be given Tuesday, December 16, at the beautiful Trimp's hall, in the West End.

Edward Weber, president of our association, extends an invitation to all members of the different locals that may be in our city at the time of our entertainment to attend and spend a pleasant evening with us.

The teaming business in St. Louis is very brisk, as all our members are very busy. Outside of a few rainy days the weather has been very favorable for teaming in the last three months.

We have had demands from our drivers in the different lines of hauling, but up to the present time all these demands were amicably settled without any trouble, and satisfactory to both parties.

A. J. KUEPPERT, Secretary.

The Pacific Northwest.

PORTLAND, OREGON.

When the Gamboa dyke, at Panama, was blown up, Portland bands played, cannon boomed, and whistles tooted. Since that time representatives of the Emery Steamship Line of Boston, have been arranging for East- and West-bound cargoes by way of the Panama canal.

A few weeks ago Judge Lovett and others of the Harriman system were looking over the Southern Pacific interests. These have been followed by James J. Hill, the Empire builder, and other railroad officials, accompanied by George F. Baker, president First National Bank, of New York, and half a dozen other railroad financiers, on an inspection tour, taking in Vancouver, B. C.; Seattle; Tacoma, and Portland.

Mr. Hill told the Portland people two steamships were under construction at Philadelphia, to ply between Astoria and San Francisco, costing \$2,500,000 each, and as Mr. Hill put it, "they would be the very best that money can buy."

Each will have a displacement of 12,000 tons, and passenger-carrying capacity of 800, and they will be the fastest and finest that ever sailed the seas under the American flag. They will be placed in commission at the beginning of 1915 in time to share in the heavy traffic that is expected because of the Panama-Pacific Exposition in San Francisco.

At Astoria they will make direct connection with the Portland-Astoria line of the Spokane, Portland and Seattle Railway. It is believed that many people going or coming to the exposition will use this route.

A Week of Turmoil at Indianapolis: Then the Striking Teamsters Compromise Their Case.

INDIANAPOLIS entered on a teamsters' strike December 1, following the resignation of Mayor Lew Shank two days before, as a result of union labor troubles within the city.

Late on Sunday, November 30, the teamsters' union of Indianapolis voted to go on strike on Monday morning. The demands of the teamsters had been drafted a week earlier and submitted to the employers. The demands include a wage scale and changes of working conditions, which vary according to the kind of work done. The new wage scale for drivers of horse wagons ranges from \$13 to \$18 a week and for chauffeurs from \$15 to \$18 a week.

The hours of labor dictated under the new scale range from eight to 12 hours a day. The union did not demand a "closed shop" but that there should be no discrimination against union men.

The union, which includes the commercial chauffeurs, is one of the strongest in the city, and has between 1,500 and 2,000 members.

A special dispensation for milk wagons driven by union teamsters was made at the beginning of the strike. Officers of the union also announced that there would be no interference with the mail or other government wagons or automobiles, or with the wagons or machines of the express companies. The strike was officially declared by the International Brotherhood of Teamsters, Chauffeurs, Stablemen and Helpers.

Strike Was Anticipated.

It had been predicted for a week before December 1 that the teamsters and chauffeurs would strike on that date, and the strike was considered assured on November 29, when Mayor Shank resigned because the labor leader could not assure him there would be no strike. Shank had been threatened with impeachment proceedings by a committee of business men if the threatened strike materialized, and resigned rather than face trial.

The strike of the Indianapolis teamsters followed a spectacular strike by the street car men. During the street car strike, Mayor Shank issued instructions that he did not desire policemen to ride on the cars manned by strikebreakers, which caused the resignation of Superintendent of Police Martin J. Hyland and President William E. Davis of the board of public safety.

At the first police roll call after Superintendent Hyland resigned, Mayor Shank made a speech in which he said he did not wish patrolmen to ride on wagons driven by non-union teamsters if a strike occurred.

"I feel that I did everything on my part to be fair to both sides during the recent street car strike," said Mayor Shank, in announcing his resignation, "but after the criticism that has been heaped on me by the safety board of the chamber of commerce I feel that I probably could not retain my position and do my duty to the general public as mayor on account of the bitter feeling that has grown out of the labor controversy."

Harry R. Wallace, city controller succeeded to the mayor's chair on Shank's resignation.

Waiting Game by Team Owners.

At the opening of the strike the Indianapolis teaming interests who are members of the National Vehicle Owners' Protective Association, announced that they had practically decided to abandon all attempt to move their wagons on first interference. They said they would put their wagons in the barn and send their horses to the country and await developments. Wholesale dealers notified their customers they would not attempt to make deliveries in case there was any interference with their wagons or automobiles.

At the final conference between employers and men, before the strike was declared, employers hiring about 250 drivers had signified their willingness to sign the wage scale, but the union leaders decided that they would not be permitted to operate. It was the general opinion of the union leaders that employers who were permitted to operate might do the business of strike bound places.

The second day of the strike saw violence, with the death of one man and the wounding of five others. It was asserted by the strikers on the first two days that 3,100 men were out on strike.

At the end of the second day of the strike Acting Mayor Wallace issued this statement:

I am entirely satisfied that we have the strike situation well in hand. The regular police force is doing splendid work and has been able to cope with the situation. It has not as yet been necessary to call on the volunteer reserves. We have established 15 sub-stations in different parts of the city, fully equipped, and have issued police powers to about 2,500 citizens to assist in keeping order and protecting property.

Chamber of Commerce Takes Part.

By December 4, employers hiring 1,100 men had expressed a willingness to sign the teamsters' scale, but Thomas J. Farrell, organizer for the men refused to allow them to settle with their employees unless all

the employers made a settlement. A volunteer committee of citizens and clergymen heard Organizer Farrell's statement of the men's cases. Organizer Farrell stated to the committee that the teamsters of Indianapolis had been receiving an average wage of \$11.09 a week, the ruling wage scale in Indianapolis being \$9 a week for single horses and \$11 for teams. In this, the organizer misrepresented the situation somewhat, since he quoted the minimum in all cases, and allowed nothing for the very general payment of overtime.

The Indianapolis Chamber of Commerce took a hand in the situation on December 5, and held a conference with J. P. Densmore, special counsel of the United States Department of Labor, who had been assigned to investigate labor conditions at Indianapolis and had arrived there the day previous. Later, the executive committee of the Commercial Vehicle Owners' Protective Association joined the conference. Mr. Densmore insisted very specifically that his mission was not one of interference at all, but purely a matter of conciliation. He cited the labor law creating the department of labor and showed it to be impossible for the department to enter into any dispute except on a request and then purely in the matter of conciliation.

Representative Densmore said the reports which had gone through the east were to the effect that the city was under martial law and that he was both surprised and gratified to find the Indianapolis situation so peaceful. On December 5 President Daniel J. Tobin, of the International Brotherhood of Teamsters, arrived in Indianapolis and took personal charge of the conduct of the men's fight. By the close of the first week of the struggle several hundred firms, including many grocers, were sending out wagons and conditions in shipping circles were resuming nearly normal conditions, according to assertions made by various managers. Owners in many instances sent out non-union drivers without guards on account of the peaceable aspect of the situation.

Efforts of Conciliation.

In an effort at Conciliation, the committee of citizens and ministers during the week sent out individual circulars to the strikers, asking them for a statement of their desires, to be used as a basis for arbitration. In two days 840 individual striking teamsters had replied to their circulars, but the demands thus received varied greatly. The Commercial Vehicle Owners' Protective Association refused to co-operate with this movement, preferring to act in a body.

By Saturday, conditions at Indianapolis were almost back to normal. The union was forced during the last two days of the week to permit the men to return to work in the cases where employers were willing to pay the men's demands, notwithstanding the fanatical demands of some of the union leaders that none of the men be permitted to return until the employers' association,

as a body, had granted the new wage scale. About 1,000 teamsters returned to work on Saturday, the 6th, many on a compromise basis.

The Compromise Agreement.

The compromise agreement, which practically marked the end of the strike, and in which the men yielded their demand for the employ of none but union teamsters and for the strict enforcement of "union recognition," was considered a practical victory for the employers. The terms the men voted to accept, and which resulted in fully half the strikers returning to work December 6 and 8, were as follows:

- 1—That employers sign an agreement to pay the minimum wage scale presented in the demands of the union.
- 2—That their employees be permitted to wear their union buttons.
- 3—That no employer shall discriminate against any union man.
- 4—That no employe who returns to his work shall be made to do any other work than that which he did before the strike was called.

All sides refused unanimously to countenance the threatened "general strike" in Indianapolis to support the teamsters' demands, which had been proposed by some of the labor fanatics. The statement was made at Washington that there would be no investigation by the United States Senate of the strike situation at Indianapolis. Both Senators Shively and Kern, of Indiana, announced that they were in receipt of telegrams from Indianapolis laboring men asking them to bring about an investigation similar to the investigation in the West Virginia mining troubles. They declined to be dragged into the controversy, however.

There were sporadic outbreaks between strikers and working teamsters during the days when a settlement was under way, with occasional "gun-play," but nothing with serious results.

National Association of Allied Horse Interests

For some months, Ralph C. Watrous, as president, has been organizing the National Association of Allied Horse Interests.

The object of this association is to promote "publicity for the horse, horse equipment and horse-drawn vehicles. The establishment of a co-operative association for the creation of interest in the horse, horse breeding, sports and industries allied with the horse."

It may interest readers to know that membership in the National Association of Allied Horse Interests is open to any "individual, partnership or corporation interested in the horse." Full information concerning the association, membership fees, etc., may be had from George H. Webb, Secretary-Commissioner, Providence, R. I.

STABLE AND HARNESS HINTS

A HEAVY OR A LIGHT SHOE?

The "Horseshoer's Journal" prints the following: "Big bills for horseshoeing is one of the cries heard by the horseshoer as coming from the owner. It is not always so, but the case is very common where it is found that one of the exterior objections to shoeing is its cost. A good panacea for this kind of an ill is shoe heavy, put on lots of calk and make the shoes wear long, then the bills must necessarily be lighter. But what about the horse, Mr. Horse Owner? What about the muscles of that all important structure, the leg; what about the box which contains the network of life and the most important bearings of the entire animal? what about the hoof? Is it to be considered or do you for a moment think of what is best for your horse when you order an unreasonable kind of shoe to be adjusted, in order to save a few dollars during the year? If horse owners would study their own best interests when considering the question they would have their horses shod as near to nature as possible. It is not meant by this that the running plate of the thoroughbred should be adjusted to the road horse or that the shoe of the road horse should be placed on the delivery or draught horse, but it is meant that reason should govern. Unquestionably it is cheaper to buy metal than to supply bone and sinew, the life and energy of the animal."

But, may we inquire, what about the shoer who purposely shoes light, or sends out a team with dull shoes in a season when icy weather may come any morning?

PRESCRIPTION FOR THRUSH.

Answering a correspondent who asks for a remedy for "thrush," a disease of the hoof that has afflicted his driving horse, "Our Dumb Animals" suggests the following: Clean the stall thoroughly once a day and remove soiled litter, giving the animal a fresh bed each night. Wash the frogs once a day with a solution of creolin, a tablespoonful to a pint of water, then apply freely powdered calomel to affected parts. In the treatment of this disease clean bedding is very important.

KEROSENE FOR RUST SPOTS.

Not only is kerosene extremely useful as an economic fuel in gas engines, but its usefulness also extends to a great many other fields. For instance, kerosene is of extreme value as a softener of rust, but in the majority of cases where it is used for that purpose it is not given sufficient time to do its work. To rub

the kerosene on and immediately wipe it off will do practically no good, but the rust spot must be immersed and the kerosene given time to penetrate. Several hours at least ought to be allowed and if the rust is heavy, all day or night. This same principle applies where kerosene is applied to a nut rusted on a bolt or stud. Only in this case the oil has to penetrate between metal faces in addition to permeating the film of rust.

CHECKREINS AND BLINDERS.

Ed. H. Packard, of Boston, who has done good work in behalf of dumb animals, wants some horse-lover humanitarian to back him financially to photograph in expert manner the tyranny and cruelties practiced upon horses in Greater Boston, including the city of Cambridge, so that he can fight these abuses through pictorial newspaper publicity.

Mr. Packard claims the barbarous practices of tight checkreins, close-fitting blinders, cutting bits, suffocating feed bags and old junk harnessing can't long exist if they are shown up in the newspapers and contrasted with humane conditions. He says:

"The public won't stand for it when they see how this blinder oppression has grown. There are 10,000 horses in Greater Boston tormented every minute of the day with great flat blinders hanging against their eyes every step they take.

"I can show there are 1,000 horses stone blind, or going blind, in Greater Boston, due to close blinders and stuffy, ammonia reeking stalls more than anything else.

"The cruelties to horses going on every day in the week, under everybody's eyes, of close-fitting blinders, tight check-reins, galling bits, suffocating feedbags, old junk harnessing and vile, stuffy, unventilated, narrow stalls, barely wide enough to accommodate a horse's body when standing up, all these tyrannical conditions can be shown up with the camera and legislated out of existence through laws brought about by pictorial publicity exposing these tyrannical conditions and contrasting them with proper and humane methods.

"I will start such a campaign, if backed for it, and will present pictures and facts that will not only shake up Boston and the State, but the whole country. The photographs and data secured can be press syndicated and used in other cities, so that the money put into this campaign will get results for horses everywhere."

DISEASES OF ANIMALS.

The MacMillan Company, New York, have published an interesting volume by Nelson S. Mays, on "The Diseases of Animals"—containing exhaustive information relative to the diseases of horses and other domestic animals; what simple remedies may be administered by ordinary hands and when the veterinar-

USE ONLY **U. S. HAMES**—THEY ARE STANDARD QUALITY

times invaluable to the layman or any owner or user of animals who hesitates to call for, or is unable to obtain, expert advice. Additional chapters discuss the "Care of Animals in Stables and Yards"; "The Horse—Judging and Handling"; "Lameness and Shoeing"; and general advice on feeding, watering and exercising animals.

The author is a well-known authority in the field and his concise treatment of so vital a subject ought to meet with popular favor.

FEED FOR WORKHORSES IN WINTER.

It is generally believed to be good practice to feed crushed or coarsely-ground oats to horses in winter. This is suggested as applicable particularly to colts and old animals. Has any reader a suggestion?

Horse-Drawn Vehicles in Chicago.

[From Farm Implements.]

The impression most people gather from being in the business section of a city these days is that the automobile has become the dominant factor in street traffic. Whether one takes his stand down town, or on the boulevards or in the parks, it is all the same—the automobile seems to dominate the scene. That it is very much in evidence there is no doubt. In Chicago, for instance, traffic experts say automobiles daily in the loop district have increased in number by 600 per cent during the last five years. This in a way accounts for the popular delusion that the horse is disappearing from the city streets. Upon the contrary, actual investigations of traffic conditions in Chicago show that the number of horse-drawn vehicles in daily service in the down-town district has increased by 30 per cent during the last two years, and that there are daily 130,000 teams on the central business streets of the city.

What the automobile truck may do eventually to drive some of these horses off the streets still is problematical; surely up to the present time the use of mechanical trucks has served hardly to check the normal increase in the number of horse-drawn vehicles.

Mule Whips Abolished in Mines.

The superintendent of a coal mine at Brazil, Ind., has issued orders, says "Popular Mechanics," that all the drivers in the employ of the company shall do away with the use of whips. Drivers who are unable to get desired results without the use of the "blacksnake" have been replaced by men who can persuade the mules to work without beating them. Some of the mules also had to be discharged, but, as a whole, it is said that much better service is obtained.

NEW ENGLAND NEWS

Our Boston Letter.

[From Our Own Correspondent.]

New England Office, TEAM OWNERS REVIEW,
79 Portland Street, Boston, Mass.,
November 20.

The regular meeting of the Team Owners' Association was held on November 5, at the Revere House, at 6:30 p. m., with 35 members present. Dinner was served at 7 o'clock, following which the meeting was called to order for business at 8, President Loveless in the chair. Following the reading and approval of the minutes, the secretary, reporting for the special committee appointed at the October meeting to consider the advisability of future relations with the labor interests, recommended, "that a standing committee be created in the Association to receive, consider and decide upon all matters of wages, working conditions, etc., that may be advanced by unions representing employees of members of the Team Owners Association."

After a protracted discussion by those present, on this report, it was voted, on motion of Mr. Bray, that the chair appoint a committee to nominate a standing committee of five, with full powers to act in all labor matters; that these names be presented at the December meeting for purposes of election.

The secretary presented a communication from the Watts Detective Agency advocating the adoption of a scheme for minimizing thefts from wagons. On motion of Mr. Waterhouse, the secretary was instructed to invite Mr. Watts to attend the regular meeting in January and go more fully into the detail of his plan.

There being no further business, the meeting adjourned at 10:30 p. m.

Hay and Grain Market.

C. F. & G. W. Eddy, Chamber of Commerce, Room 204, furnish the following quotations:

| | |
|---|------|
| Northwestern Canada oats, good | 46 c |
| No. 1 | 22 c |
| No. 2 | 20 c |
| No. 2 Yellow corn, new, December shipment | 76½c |

A nice trade in hay and feed has been reported in the Boston market during the month just ending. Trade promises to be better the present winter than it was a year ago, from reports that come in from active traders.

Oat Crusher Sales.

New England agents for the Bell Oat Crusher have been consulted. Such a work as this may be at

USE ONLY **U. S. HAMES**—THEY ARE STANDARD QUALITY

placed in Boston four of these machines, everyone being very much pleased with the results. Every one should crush his own grain. The advantage is that you know what you crush and if you buy crushed or mixed food you know nothing of what they crush.

Boston Horse Market.

Statement of H. L. Brockaway, 153 Portland street, Boston, Mass., commission dealer in all grades of horses:

The price of horses have not changed materially, but not so good a demand. The market will remain quiet until after the holidays. If snow should come it would cause quite a demand for second-hand horses. I regret to mention that Mr. Brockway has been confined to his home for the past week. He expects to be on deck Monday morning, ready to buy, swap and sell.

Back on the Job.

We are very glad to see Alexander Grimes of A. Grimes & Son, back in the harness. Mr. Grimes has been a little under the weather during the summer months, but has come back feeling much better. Mr. Grimes will probably be the next president of the Boston Team Owners' Association.

W. D. QUIMBY.

Glanders Cases in London.

The quarterly report of the London County Council with reference to the Glanders Order states that during the 12 weeks ended October 4 there were 24 cases of glanders in London reported to the council's veterinary inspectors. All the animals were slaughtered; and compensation amounting to one-half of the value of the animals was paid to the owner in each of the 14 cases in which the disease was diagnosed by the molle test. In seven cases, which were diagnosed by outward symptoms, compensation of £2 was paid, while in the three remaining cases no compensation was payable. The report states that it is satisfactory to be able to record that the number of cases of glanders occurring in London is appreciably less in the past, as evidenced by the fact that during the last three weeks of the period above referred to only three cases of the disease occurred.—"The Worlds Carriers," London.

A Driver Who Got "in Bad."

That it pays to be careful in unloading coal was shown at Boston, Mass., last month, when a new driver dumped a load of coal down a tube leading to an artesian well instead of the coal chute. The two covers were closed together and the driver opened the wrong one. As a result the well was clogged and there was no way of getting the coal out except by long and strenuous work.—From "Retail Coalman."

NERVOUSNESS IN HORSES: WHY IT IS DECREASING.

SEVERAL months ago the "Breeder's Gazette" made this assertion: "Nervousness has increased at an alarming rate in horses during the past few years, especially in the United States. It seems to be a physical condition due to the increase of street cars, motorcycles, automobiles and other noisy mechanical devices, and has been attracting the attention of veterinarians and breeders in a large degree."

To which the "Pacific Horse Review," of Portland, Oregon, responds vigorously, as follows:

"We think not one practical horseman in a hundred will admit the truth of that statement. Our own observation among horses, both in the cities and rural districts, have come to be truer and handsomer ones. The strip-vides referred to, lead us to believe that exactly the opposite is true. Who has not noticed in the last few years that it is an unusual thing to see a horse badly frightened by an auto, electric car or train? Actual experience leads us to believe that colts and green horses that have never seen any of these noisy machines are not nearly so badly frightened by them as the average horse was 15 or 20 years ago. In fact, hundreds of times in the last two or three years we have commented on this while talking with practical horsemen and never have we found any of them holding a contrary opinion.

"We also notice that our race horses as a class are freer from extreme nervousness than formerly; 15 years ago we can remember many horses so nervous that it was almost impossible to jog them on the roads and others that could not be jogged on the track with any degree of comfort; nowadays it is but rarely that we see a case of that kind.

"No! We are congratulating ourselves on the fact that our horses are year by year becoming sounder, mentally and physically and in every way more perfectly adapted to the purpose for which they were intended."

To this argument the Team Owners Review would like also to add the weight of its humble opinion to this effect:

That the adaptability the horse has shown in accepting the high-power automobile and particularly the high-power auto and trolley headlight of the present day is little short of marvelous. That the usefulness of the horse has not been utterly forfeited by our modern civilization in the adoption of these blinding, glaring lights for highway vehicles and traction cars in city streets is the greatest proof of the horse's intelligence that we can have. The horse is less nervous than a dozen years ago—but only because the faithful animal

has schooled himself to stand up against constant shocks. You, Mr. Driver, must remember that upon your seat you are to a degree sheltered from the blinding glare of the acetylene headlight, with its powerful reflectors, in the lamps of the auto coming toward you; the horse—and he cannot reason it out either—receives the full effect of the hideous white “spot-light” on a level with his eyes. How often, as you crossed the street on foot in the past year or two have you been blinded and startled so that you lost your head for a minute or two, when one of these high-powered lights caught you squarely in the eyes! Consider, then, the intelligence of the horse! Should even the city-bred animal be blamed if he ran away a half dozen times a night, when we consider the sort of shocks we subject him to?

No; these things are getting on the nerves of man and all other creatures of civilization excepting the steadiest of them all—the horse!

Comment on Pennsylvania's New Law.

A Massachusetts correspondent writes “Our Dumb Animals”:

Pennsylvania has a new humane law. Hereafter in cities of the first and second class, in that State, it will be unlawful to work any horse or other animal used for commercial purposes, more than 15 hours out of any 24. The Pennsylvania Society tried to limit the hours to 12, and to have the measure operative throughout the entire State, but were obliged to yield something to get as much as they did. It is a fine beginning in a new form of protective legislation. Under the general cruelty act in our State we have repeatedly stopped the working of horses for more than 12 consecutive hours. No horses are allowed to work days, and then, after a few hours rest, put on for night service, if we can learn of it.

The Largest Hide in the World.

One of the largest hides imported into the United States was received recently by the Moon Motor Car Company. The hide contains 87½ square feet. It measures 11 feet in its greatest length and the greatest width is nine feet. The hide came from France, where the largest hides in the world are produced to-day. It is a peculiar fact that it was not generally known that the largest steers were to be found in France until the demand of the automobile industry for the very best leather for upholstery combed the world for the best in existence.

At the annual convention of the Wholesale Saddlery Association in 1911 Elmer E. Fisher of Minneapolis, was elected to the presidency.

VETERINARY VACCINES: A GOVERNMENT BULLETIN.

The Bureau of Animal Industry at Washington has issued the following bulletin on the supervision of veterinary vaccines and serums. The bulletin is by B. T. Galloway, assistant secretary of Agriculture:

“The Department of Agriculture, on July 1, 1913, was given supervision and control over the manufacture of biological products for the treatment of domestic animals by an act of Congress of March 4, 1913. The numerous complaints which had previously been received from time to time relative to the impotency of some of the preparations, and also the fact that in some instances the use of the products was directly responsible in causing outbreaks of disease, make the necessity for such control obvious.

“The manufacture of biological products for human use is subject to the control of the Public Health and Marine-Hospital Service, and this supervision has proved to be of great value in the protection of human health. All manufacturers preparing biological products for veterinary use, such as antitoxins, serums, vaccines, and other analogous preparations are now placed under the supervision of the Department of Agriculture, and since the requirements for the preparations are of the highest standard, the purity and potency will be strictly controlled.

“Biological products are more extensively used in the treatment of diseases of animals than in the practice of human medicine. Some of the infectious diseases occur only in a certain species of our domestic animals, while others may be transmitted to all of the species. Thus, veterinary medicine deals with a greater number of infectious diseases than is the case in human medicine. Glanders, for instance, is an infectious disease of horses and similar animals, Texas fever an affection of cattle, while anthrax, on the other hand, may affect all kinds of animals.

“In the control of infectious diseases the use of biological products plays an important part. The protection of animals from certain diseases by vaccination is not longer doubted, as for instance in blackleg of cattle and hog cholera of swine. It is only natural that in order to obtain the desired results from such a protective vaccination, the product must be potent and pure. In many instances where bad results follow vaccination it can not be attributed to the failure of the method, but often to the impotent vaccine.

“Biological products are also extensively used for diagnostic purposes of certain diseases, and they prove of very great value in affections in which the diagnosis can not always be determined by an examination of

the animal. Of these, tuberculin is without doubt of the highest importance, as by its judicious use the disease may be eradicated from a herd, and the introduction of the disease into a healthy herd may be prevented.

"With the enforcement of the regulations it is hoped that the biological products for veterinary use will be more uniformly effective, and that the same care will be exercised in their preparation as obtains with the products for human use."

Veterinary Education in New York State.

Contributors to the "American Veterinary Review," commenting on recent criticism of American veterinary methods, call attention to the creation of a State veterinary college in New York city, to which the "Horseshoers' Journal" adds: "While we have a State college in connection with Cornell University at Ithaca, N. Y., there is no place like a great city for clinic material. This has been shown abroad, where the veterinary colleges are located in London, Edinburgh, Dublin, Paris, Berlin and other capitals. They are also located at Chicago, Kansas City and Philadelphia."

The announcement at the beginning of the present school year that a horseshoers' school would be opened this winter in connection with the veterinary department at Cornell University, N. Y., received the commendation of practically all of the horse papers of the country, as well as those issued in behalf of agricultural interests. The "Connecticut Farmer and New England Farmer" said: "There is scarcely a horse owner in the country but who at some time has not had trouble with his horse because of incompetent horseshoers. While it is true we have many excellent horseshoers, it is equally true that we have many who are incompetent, and we regard the opening of the school in connection with the veterinary department at Cornell with a great deal of pleasure."

The great iron and steel interests nowadays have their metallurgical and laboratory experts; why should not a large teaming and hauling concern have among its officers a veterinary expert and a hoof expert—even if a junior member of the firm must go to a recognized school and take a special course of a few weeks? We venture it would be found to be economy in the course of a few years. Everybody "specializes" now; why not the team owner?

A Treadmill Horse Retires With Honors.

After 20 years of service as a one-horsepower motor, operating the elevator in a stable on Forty-ninth street, New York, says "Popular Mechanics," a horse has retired in favor of an electric motor. So intelligent did the animal become, that it is said he could tell where to stop by simply looking over the edge of the elevator well to see what sort of a vehicle he was lifting. He knew the carriages belonged on one floor, and the coaches and a hearse on another.

A Pleased Customer.

The following worth-while testimonial comes to us from the Auburn Wagon Company, Martinsburg, W. Va.:

NORFOLK, VA., Oct. 21, 1913.

Manager, Auburn Wagon Co., Martinsburg, W. Va.—

Our two trucks arrived to-day, have been assembled and carefully inspected.

We cannot make our expression of satisfaction too strong. No better trucks ever rolled over the streets of this city. In every particular they more than come up to our expectations and we feel indebted to you for the quality of the job as well as pleasant and business-like manner in which you have handled us.

If an expression from our firm will at any time be of value to you in securing new business we assure you it will be a pleasure to have you call on us.

Please extend to G. F. Goodwyn our regards and invitation to see us when next in this city.

We enclose our check covering invoices for the trucks and will thank you to return us the usual receipt. Thanking you again for the manner in which you have handled our first order and trusting we may be able to call on you again at a later date, we are,

Very truly yours,

NORFOLK & PORTSMOUTH TRANSFER COMPANY,

By George W. Price, Prop.

Rejects Motor Truck for Horse.

The United States Express Company has found that the horse still affords the cheapest and surest means of moving light loads short distances. This company has lately replaced all its motor vehicles with horses in Newark (N. J.) and several other cities, and is now working about 5,000 head on its delivery wagons throughout the country. Duncan L. Roberts, the new president of the company, has set out to purchase fresh equipment of the highest class, and to this end is retiring the old as rapidly as possible by selling off the old horses and wagons under the hammer, to make place for the new. The next sale will take place in the near future, when 155 horses are to be disposed of at the company's stables in Jersey City.

A Rust-Proof Coating.

A new patent rust-proof coating for iron or steel is being used in England and is in the form of a paint that is applied to the surface of the article to be treated and is then baked. The following are the proportions of the ingredients by weight: Linseed oil, 25 parts; calcium resinate, 36 parts; manganese borate, ½ part; sugar of lead, 1 part; naphtha, 37½ parts; artificial graphite, 25 parts. The whole is mixed and applied to the steel or by brushing, dipping, or other procedure. The article is then baked at 300 degrees, Fahrenheit for a period of one hour and forty minutes. It is stated that the coating is highly lustrous and is resistant to corrosive influences, but that no other form of graphite gives satisfactory results.

When to Water the Horse.

A bulletin recently issued by the Australian government regarding water for horses and the proper time to give it, gives the following advice:

Horses require from five to 15 gallons of water a day, the quantity depending upon the temperature and the amount of work performed. The water should be as pure as possible, clear in appearance and free from taste, color and smell. Pure water is just as essential to a horse as it is to a man, and it is a mistake to suppose that a horse can drink badly contaminated water with impunity. Water obtained from pools or shallow wells, contaminated with surface drainage, or containing decomposing organic matter, frequently causes diarrhoea, and generally predisposes to colic. Water that contains a large amount of sediment should not be given, as the sediment causes a mechanical irritation of the mucous membrane of the stomach and intestines, i. e., sand colic. When at rest in the stable, water should be given three times a day, and should invariably be given previous to feeding.

This latter point is of considerable practical importance. A horse's stomach is small in proportion to its size, and water does not remain in it, but passes through the stomach and small bowel to the caecum, or water-gut. If water is given after feeding, besides weakening the digestive juices, a considerable portion of the food in the stomach and small intestines will be washed out in an undigested state and indigestion and colic may result. Water in small quantities can be given within an hour or so from the completion of feeding if desired. After a long journey, a good plan is to water the horse a mile or so before the journey's end, and take the horse slowly in afterwards. This prevents chills and colic, due to the ingestion of a large quantity of water in an exhausted state. An animal, after prolonged exertion or fast work, has his system depleted of fluid. He will not eat sufficiently until his thirst has been satisfied; therefore, the water should come first, and while the animal is still warm is the best time to give it. After standing, the body temperature falls, and to give cold water freely then is only to intensify the effect of the cold water on the system.

Where Old Dobbin Wins.

[From the Mason Journal.]

The auto is often spoken of as a pleasure vehicle. In general this is largely true, but there is one case where it cannot compete with old Dobbin.

When it comes to taking your best girl out on a Sunday evening, we do not believe that any auto ever put out, no matter how costly, can compare with old Dobbin for genuine pleasure.

Now, you old bald-headed reprobate over there, don't try to tell us you know better. You were young once. If you were not, you missed a lot of the pleasures of this life. Do you remember how you used to hitch

up Dobbin to that sidebar buggy and drive around to that little girl's home? How Dobbin would dance while you were waiting for her to put on her hat, and how he went prancing off and for the first few miles it took all your attention to manage him? Once in a while he would make a sudden start, and that little girl at your side would give a little scream and hang tighter to your arm—yes, you are beginning to remember.

Well, you kept on going until the little girl reminded you that it was getting about time to start for home. Then you promised to turn at the next corner. You turned all right, but only part way, and went around another section. Then, as dusk stole over the scene, Dobbin, at a few magic words from you, suddenly slacked his pace and became as gentle as a kitten. You no longer needed both hands to control him. Suddenly one arm is free and is laid along the back of the seat and gradually is dropped about the waist of that girl. Just for appearance, or to make you appreciate it more, she probably pushed it back a time or two, but at last you got it firmly in place and old Dobbin was entirely forgotten in the pleasure of the companionship of the one little girl in all the world for you. The way home was never too long or the night too dark for Dobbin to bring you safely back.

What show has a young fellow in an auto, with both hands on the steering wheel and his eye glued to the road in watch for danger? We would not give one of those old-time rides with Dobbin in the shafts for a hundred giddy whirls in an 80-horsepower auto.

The New Feed Bag.

[HELEN M. RICHARDSON, in "Our Dumb Animals."]

The work horse that has to eat his dinner from a tight, close-fitting nose-bag, advertises a cruel driver—"Our Dumb Animals."

If men but knew how grateful
It hangs beneath my nose;
A present from my master,
For Christmas, I suppose.
Just note the little window
Where I can get the air
Between my spells of eating;—
It's welcome, I declare.

It used to be so stuffy
In my old canvas bag,
I often thought I'd smother;—
I couldn't even wag
My nose about, so tightly
'Twas fastened to my head.
No comfort it afforded
Whenever I was fed.

If men but knew how grateful
For thoughtful, loving care
We horses are, they'd oftener
A gift like this prepare.
If every horse, at Christmas,
Could have a gift like this,
I think he'd be delighted,
And eat his oats in bliss.

::: Motor Truck Owners Review :::

"THE MOTOR TRUCK FOR YOUR JOB."

**Compilation of Truck Capacities and Prices
Arranged by Theodore M. R. Von Keler,
in the "Scientific American."**

IN presenting this list of motor truck capacities and prices, "Scientific American" makes this statement, in explanation:

"To arrange commercial motor vehicles according to price is almost impossible, as the great majority of both heavy and light cars are furnished with bodies suited to the special needs of the purchaser. This list, therefore, has been based upon the carrying capacity, and the prices in most instances apply to the chassis, fitted with driver's seat.

"Bodies in a great variety of forms are furnished by the manufacturers at prices ranging from \$100 upward.

"The majority of truck manufacturers are willing to sell to small merchants on easy payments, and to supervise the installation of motor service by means of their own service departments."

CAPACITY 500 TO 1000 POUNDS.

Anderson Electric Car Company, Detroit, Mich. (\$2,345)
Bessemer Motor Truck Company, Grove City, Pa. (\$1,250)
Bowling Green Motor Car Company, Bowling Green, O. (\$1,200)
Chase Motor Truck Company, Syracuse, N. Y. (\$500)
Commerce Motor Car Company, Detroit, Mich. (\$750)
Dart Manufacturing Company, Waterloo, Iowa. (\$750)
Durant-Dort Carriage Company, Flint, Mich. (\$750)
General Vehicle Company, Long Island City, N. Y. (\$1,370)
Hupp Motor Car Company, Detroit, Mich. (\$950)
Ideal Auto Company, Fort Wayne, Ind. (\$1,500)
McIntyre, W. H., Company, Auburn, Ind. (\$600)
Mercury Manufacturing Company, Chicago, Ill. (\$750-\$900)
Moon, J. W., Buggy Company, St. Louis, Mo. (\$1,150)
Studebaker Corporation, South Bend, Ind. (\$1,500)
Sullivan Motor Car Company, Rochester, N. Y. (\$925)
U. S. Motor Company, Detroit, Mich. (\$1,400)
Ward Motor Vehicle Company, New York city. (\$1,200)
Waverly Company, Indianapolis, Ind. (\$1,800)

CAPACITY FROM 1001 TO 2000 POUNDS.

Adams Brothers Company, Findlay, Ohio. (\$2,100)
Alden-Sampson Manufacturing Company, Detroit, Mich. (\$2,000)
Anderson Electric Car Company, Detroit, Mich. (\$2870)
Atterbury Motor Car Company, Buffalo, N. Y. (\$1,500)
Available Truck Company, Chicago, Ill. (\$900-\$1,350)

Avery Company, Peoria, Ill. (\$2,000)
Bessemer Motor Truck Company, Grove City, Pa. (\$1,800)
Bowling Green Motor Car Company, Bowling Green, O. (\$1,600)
Brown Commercial Car Company, Peru Ind. (\$1,650)
Buick Motor Company, Flint, Mich. (\$1,000-\$1,400)
Chase Motor Truck Company, Syracuse, N. Y. (\$1,250)
Chicago Pneumatic Tool Company, Chicago, Ill. (\$1,050)
Croce Auto Company, Asbury Park, N. J. (\$1,850)
Dart Manufacturing Company, Waterloo, Iowa. (\$1,100)
Durant-Dort Carriage Company, Flint, Mich. (\$1,375)
General Vehicle Company, Long Island City, N. Y. (\$1,710)
Gramm Motor Truck Company, Lima, O. (\$1,750)
Harwood-Barley Manufacturing Company, Marion, Ind.
Hexter Motor Truck Company, Lima, O. (\$1,750)
Hupp Motor Car Company, Detroit, Mich. (\$750)
Ideal Auto Company, Fort Wayne, Ind. (\$1,750-\$2,000)
International Motor Company New York city. (\$2,500)
Kelly-Springfield Motor Truck Company, Springfield, O. (\$2,000)
Kissell Motor Car Company, Hartford, Wis. (\$1,500)
Knickerbocker Motor Truck Manufacturing Company, New York city. (\$2,000)
Koehler, H. J., Company, New York city. (\$750)
Krebs Commercial Car Company, Clyde, O. (\$1,375)
Lauth-Juergens Motor Car Company, Fremont, Ohio. (\$2,100)
Lippard-Stewart Motor Car Company, Buffalo, N. Y. (\$1,650-\$1,675)
McIntyre, W. H., Company, Auburn, Ind. (\$1,500)
National Motor Truck Company, Bay City, Mich. (\$1,225)
Nyberg Automobile Works, Anderson, Ind. (\$1,300)
Oakland Motor Car Company, Detroit, Mich. (\$1,500)
Piggins Motor Truck Company, Racine, Wis. (\$1,750)
Pope Manufacturing Company, Hartford, Conn. (\$1,750)
Poyer, D. F., Company, Menominee, Ind. (\$1,200-\$1,500)
Reo Motor Truck Company, Lansing, Mich. (\$750)
Rowe Motor Manufacturing Company, Coatesville, Pa. (\$1,700-\$2,100)
Sandusky Motor Truck Company, Sandusky, Ohio. (\$1,400)
Sanford Motor Truck Company, Syracuse, N. Y. (\$1,660)
Selden Truck Sales Company, Rochester, N. Y. (\$2,000)
Service Motor Car Company, Wabash, Ind. (\$1,350-\$1,475)
Stewart Motor Corporation, Buffalo, N. Y. (\$1,650)
Studebaker Corporation, South Bend, Ind. (\$2,000)

Sullivan Motor Car Company, Rochester, N. Y. (\$1,050)
 Transit Motor Truck Company, Louisville, Ky. (\$1,850)
 Universal Motor Truck Company, Milwaukee, Wis. (\$1,950)
 Veile Motor Vehicle Company, New York city. (\$2,000)
 Waverly Company, Indianapolis, Ind. (\$2,100)
 Waverly Company, Indianapolis, Ind. (\$2,500)
 Wilcox Motor Car Company, Minneapolis, Minn. (\$2,300)

CAPACITY FROM 2,001 TO 3,000 POUNDS.

Adams Brothers Company, Findlay, Ohio. (\$2,300)
 Alden-Sampson Manufacturing Company, Detroit, Mich. (\$2,500)
 Anderson Electric Car Company, Detroit, Mich. (\$3,132.50)
 Atterbury Motor Car Company, Buffalo, N. Y. (\$2,300)
 Auto Car Company, Ardmore, Pa. (\$2,150)
 Bessemer Motor Truck Company, Grove City, Pa. (\$2,100)
 Blair Manufacturing Company, Newark, O. (\$3,000)
 Bowling Green Motor Company, Bowling Green, O. (\$1,850)
 Chase Motor Truck Company, Syracuse, N. Y. (\$1,750)
 Croce Auto Company, Asbury Park, N. J. (\$2,500)
 Dart Manufacturing Company, Waterloo, Iowa. (\$1,800)
 Federal Motor Truck Company, Detroit, Mich. (\$1,800)
 Four-Wheel Drive Company, Clintonville, Wis. (\$3,600)
 General Motors Company, Detroit, Mich. (\$2,075)
 Grand Rapids Motor Truck Company, Grand Rapids, Mich. (\$2,200-\$2,500)
 Harwood-Barley Manufacturing Company, Marion, Ind. (\$2,000)
 Ideal Auto Company, Fort Wayne, Ind. (\$2,250)
 International Motor Company, New York city. (\$2,750)
 Juno Motor Truck Company, Juneau, Wis. (\$2,200)
 Knickerbocker Motor Truck Manufacturing Company, New York city. (\$2,250)
 Krebs Commercial Car Company, Clyde, O. (\$1,775)
 Mais Motor Truck Company, Indianapolis, Ind. (\$2,750-\$2,800)
 McIntyre, W. H., Company, Auburn, Ind. (\$2,300)
 Moon, J. W., Buggy Company, St. Louis, Mo. (\$1,900)
 Piggins Motor Truck Company, Racine, Wis. (\$2,250)
 Reo Motor Truck Company, Lansing, Mich. (\$1,800)
 Rowe Motor Manufacturing Company, Coatesville, Pa. (\$2,850)
 Sanford Motor Truck Company, Syracuse, N. Y. (\$1,910)
 Service Motor Company, Wabash, Ind. (\$1,675)
 Studebaker Corporation, South Bend, Ind. (\$2,950)
 Transit Motor Truck Company, Louisville, Ky. (\$2,300)
 Universal Motor Truck Company, Milwaukee, Wis. (\$2,750)
 U. S. Motor Company, Detroit, Mich. (\$2,200)
 Walter Motor Truck Company, New York city. (\$2,800)
 White Company, Cleveland, O. (\$3,000)

Wilcox Motor Car Company, Minneapolis, Minn. (\$2,500)

CAPACITY FROM 3,001 TO 4,000 POUNDS.

Adams Brothers Company, Findlay, Ohio. (\$2,500)
 Alden-Sampson Manufacturing Company, Detroit, Mich. (\$2,800)
 American Locomotive Company, Schenectady, N. Y. (\$2,950)
 Atterbury Motor Car Company, Buffalo, N. Y. (\$2,650)
 Avery Company, Peoria, Ill. (\$2,700)
 Chase Motor Truck Company, Syracuse, N. Y. (\$2,200)
 Croce Auto Company, Asbury Park, N. J. (\$2,850)
 Garford Company, Elyria, O. (\$2,800)
 General Motors Company, Detroit, Mich. (\$2,750)
 General Vehicle Company, Long Island City, N. Y. (\$2,090)
 Gramm-Bernstein Company, Lima, O. (\$2,750)
 Gramm Motor Truck Company, Lima, O. (\$2,600)
 Harwood-Barley Manufacturing Company, Marion, Ind. (\$2,500)
 Hexter Motor Truck Company, Lima, O. (\$2,600)
 Ideal Auto Company, Ft. Wayne, Ind. (\$2,500)
 International Motor Company, New York city, N. Y. (\$3,000)
 Juno Motor Truck Company, Juneau, Wis. (\$2,800)
 Kissell Motor Car Company, Hartford, Wis. (\$2,750)
 Knox Auto Company, Springfield, Mass. (\$3,000)
 Lauth-Juergens Motor Car Company, Fremont, O. (\$2,800)
 Mais Motor Truck Company, Indianapolis, Ind. (\$2,950-\$3,000)
 Mogul Motor Truck Company, Chicago, Ill. (\$2,750)
 Packard Motor Car Company, Detroit, Mich. (\$2,800)
 Packers Motor Truck Company, Wheeling, W. Va. (\$2,675)
 Piggins Motor Truck Company, Racine, Wis. (\$2,750)
 Reo Motor Truck Company, Lansing, Mich. (\$1,950)
 Rowe Motor Manufacturing Company, Coatesville, Pa. (\$1,100)
 Smith, A. O., Company, Milwaukee, Wis. (\$3,000)
 Speedwell Motor Car Company, Dayton, O. (\$2,850)
 Sternberg Motor Truck Company, Milwaukee, Wis. (\$2,800)
 Studebaker Corporation, South Bend, Ind. (\$3,300)
 Suburban Truck Company, 1420 Chestnut St., Philadelphia, Pa. (\$2,750)
 Transit Motor Truck Company, Louisville, Ky. (\$2,850)
 Universal Motor Truck Company, Milwaukee, Wis. (\$2,750)
 Veile Motor Vehicle Company, Moline, Ill. (\$2,850)
 Walter Motor Truck Company, New York city. (\$3,000)
 Ward Motor Vehicle Company, New York city. (\$2,900)
 Waverly Company, Indianapolis, Ind. (\$3,000)

CAPACITY FROM 4,001 TO 6,000 POUNDS.

Alden-Sampson Motor Car Company, Detroit, Mich. (\$3,400)

Atterbury Motor Car Company, Buffalo, N. Y. (\$3,350)
 Avery Company, Peoria, Ill. (\$3,200)
 Blair Manufacturing Company, Newark, O. (\$3,250)
 Couple-Gear Freight Wheel Company, Grand Rapids, Mich. (\$3,500)
 Croce Auto Company, Asbury Park, N. J. (\$3,600)
 Federal Motor Truck Company, Detroit, Mich. (\$2,800)
 Four-Wheel Drive Company, Clintonville, Wis. (\$4,000)
 Garford Company, Elyria, O. (\$3,500)
 Gramm Motor Truck Company, Lima, O. (\$3,500)
 Harwood-Barley Manufacturing Company, Marion, Ind. (\$3,200)
 Hexter Motor Truck Company, Lima, O. (\$3,500)
 International Motor Company, New York city. (\$3,750)
 Juno Motor Truck Company, Juneau, Wis. (\$3,400)
 Kelly-Springfield Motor Truck Company, Springfield, O. (\$3,400)
 Kissel Motor Car Company, Hartford, Wis. (\$3,350)
 Knickerbocker Motor Truck Manufacturing Company, New York city. (\$3,500)
 Knox Automobile Company, Springfield, Mass. (\$3,700)
 Lauth-Juergens Motor Car Company, Fremont, O. (\$3,450)
 Mais Motor Truck Company, Indianapolis, Ind. (\$3,400)
 McIntyre, W. H., Company, Auburn, Ind. (\$3,200)
 Packard Motor Car Company, Detroit, Mich. (\$3,400)
 Peerless Motor Car Company, Cleveland, O. (\$3,700)
 Piggins Motor Truck Company, Racine, Wis. (\$3,000)
 Rowe Motor Manufacturing Company, Coatesville, Pa. (\$3,400)
 Standard Motor Truck Company, Detroit, Mich. (\$2,750)
 Service Motor Car Company, Wabash, Ind. (\$2,475)
 Sternberg Motor Truck Company, Milwaukee, Wis. (\$3,400)
 Universal Motor Truck Company, Milwaukee, Wis. (\$3,400-\$3,500)
 U. S. Motor Company, Detroit, Mich. (\$3,400)
 Veile Motor Vehicle Company, Moline, Ill. (\$3,350)
 Victor Motor Truck Company, Buffalo, N. Y. (\$2,750)
 Walter Motor Truck Company, New York city. (\$3,400)
 White Company, Cleveland, O. (\$3,700)
 Wilcox Motor Car Company, Minneapolis, Minn. (\$3,250)
 Wyckoff, Church & Partridge, New York city. (\$4,750)

CAPACITY FROM 6,001 TO 8,000 POUNDS.

Alden-Sampson Motor Car Company, Detroit, Mich. (\$4,250)
 American Locomotive Company, Schenectady, N. Y. (\$3,650)
 Anderson Electric Car Company, Detroit, Mich. (\$5,000)
 Blair Manufacturing Company, Newark, O. (\$3,750)
 Couple-Gear Freight Wheel Company, Grand Rapids, Mich. (\$4,400)
 Garford Company, Elyria, O. (\$3,850)
 General Motors Company, Detroit, Mich. (\$3,500-\$3,750)
 General Vehicle Company, Long Island City, N. Y. (\$2,620)

Gramm-Bernstein Company, Lima, O. (\$3,600)
 International Motor Company, New York city. (\$4,250)
 Kissel Motor Car Company, Hartford, Wis. (\$3,650)
 Knickerbocker Motor Truck Manufacturing Company. (\$4,000)
 Mogul Motor Truck Company, Chicago, Ill. (\$3,800)
 Packers Motor Truck Company, Wheeling, W. Va. (\$3,500)
 Peerless Motor Car Company, Cleveland, O. (\$4,000)
 Smith, A. O., Company, Milwaukee, Wis. (\$3,750)
 Speedwell Motor Car Company, Dayton, O. (\$3,750)
 Sternberg Motor Truck Company, Milwaukee, Wis. (\$4,000)
 Studebaker Corporation, South Bend, Ind. (\$3,500)
 Transit Motor Truck Company, Louisville, Ky. (\$3,500-\$3,750)
 Walter Motor Truck Company, New York city. (\$3,750)
 Ward Motor Vehicle Company, New York city. (\$3,400)
 Waverly Company, Indianapolis, Ind. (\$3,500)
 Wyckoff, Church & Partridge, New York city. (\$5,250)

CAPACITY FROM 8,001 TO 10,000 POUNDS.

Aires Motor Truck Company, New York city. (\$5,250)
 Alden-Sampson Motor Car Company, Detroit, Mich. (\$4,750)
 American Locomotive Company, Schenectady, N. Y. (\$4,750)
 Atterbury Motor Car Company, Buffalo, N. Y. (\$4,250)
 Avery Company, Peoria, Ill. (\$4,500)
 Couple-Gear Freight Wheel Company, Grand Rapids, Mich. (\$5,000)
 Croce Auto Company, Asbury Park, N. J. (\$4,500)
 Garford Company, Elyria, O. (\$4,500)
 General Motors Company, Pontiac, Mich. (\$4,400)
 General Vehicle Company, Long Island City, N. Y. (\$2,950)
 Gramm Motor Truck Company, Lima, O. (\$4,500)
 Hexter Motor Truck Company, Lima, O. (\$4,500)
 International Motor Company, New York city, N. Y. (\$4,800-\$5,000)
 Kissel Motor Car Company, Hartford, Wis. (\$4,350)
 Knickerbocker Motor Truck Manufacturing Company, New York city. (\$4,500)
 Lauth-Juergens Motor Car Company, Fremont, O. (\$4,500)
 Locomobile Company of America, Bridgeport, Conn. (\$4,800)
 McIntyre, W. H., Company, Auburn, Ind. (\$4,200)
 Packard Motor Car Company, Detroit, Mich. (\$4,500)
 Peerless Motor Car Company, Cleveland, O. (\$4,500)
 Pierce-Arrow Motor Car Company, Buffalo, N. Y. (\$4,500)
 Piggins Motor Truck Company, Racine, Wis. (\$3,800)
 Rowe Motor Manufacturing Company, Coatesville, Pa. (\$4,500)
 Sternberg Motor Truck Company, Milwaukee, Wis. (\$4,500)
 Studebaker Corporation, South Bend, Ind. (\$4,250)
 Transit Motor Car Company, Louisville, Ky. (\$4,500)

U. S. Motor Company, Detroit, Mich. (\$4,750)
 Victor Motor Truck Company, Buffalo, N. Y. (\$3,650)
 Walter Motor Truck Company, New York city. (\$4,500)
 Waverly Company, Indianapolis, Ind. (\$4,000)
 White Company, Cleveland, O. (\$4,500)
 Wyckoff, Church & Partridge, New York city. (\$5,750)

CAPACITY FROM 10,001 TO 14,000 POUNDS.

Aires Motor Truck Company, New York city. (\$6,000)
 American Locomotive Company, Schenectady, N. Y. (\$5,200)
 Couple-Gear Freight Wheel Company, Grand Rapids, Mich. (\$5,600)
 Garford Company, Elyria, O. (\$4,850)
 General Motors Company, Detroit, Mich. (\$4,400)
 Hexter Motor Truck Company, Lima, O. (\$4,750)
 Hydraulic Truck Sales Company, New York city. (\$5,500)
 International Motor Company, New York city. (\$5,300-\$6,000)
 Mogul Motor Truck Company, Chicago, Ill. (\$4,400)
 Smith, A. O., Company, Milwaukee, Wis. (\$4,750)
 Speedwell Motor Car Company, Dayton, O. (\$4,400)
 Transit Motor Truck Company, Louisville, Ky. (\$4,500)
 Victor Motor Truck Company, Buffalo, N. Y. (\$3,650)
 Walter Motor Truck Company, New York city. \$5,000
 Wyckoff, Church & Partridge, New York city. (\$6,250)

The "Scientific American" list includes still higher capacity trucks, but those up to 10,000 or 14,000 pounds would seem to be as heavy as the average teaming and trucking concern would require.

Why Motor Trucks Save.

"The big risks that are taken with draft horses is not fully realized by some owners, for the reason that fate has happened to deal kindly with them," said C. H. McCausland, a New York dealer in a recent interview. "Nevertheless hundreds of work horses which cost from \$200 to \$400 die from illness or accident every day and in a large percentage of cases they have been in possession of the unfortunate owner but a short time. If the owner is a prudent man and has insured the animal, he is still out 50 per cent of its cost, as the insurance companies will take only a 50 per cent risk on work horses.

"There recently came to my attention the case of an owner who lost 12 horses inside of three years at a loss of \$2,400. He thereupon decided to buy a motor truck. On this truck he carries insurance that fully protects him. If it is destroyed he will get its entire value. If he has a collision, injures a human being, or destroys property, the insurance company must defend the suit, pay the costs, and bear the burden of a verdict if the case is so decided. Should the machine be damaged the insurance company must make the repairs. He can go to sleep at night serene in the thought that his means of making a livelihood is never in jeopardy.

This was a condition that was impossible when he depended on horses.

"The year around, but particularly in winter, the horse is susceptible to a multitude of diseases. He also is more than likely to fall and break a leg or to suffer temporary incapacity through weather conditions at a time when he is most needed."

Motor Coal Wagon at Ardmore, Pa.

Smedley & Mehl, coal merchants of Ardmore, Pa., near Philadelphia, are preparing for winter deliveries and recently purchased an Autocar for this purpose. They find the car easily does the work of three double teams. As an instance of an afternoon's work, they hauled eight two-ton loads of coal to the residence of a customer a mile and a quarter distant from the coal yard. They finished the afternoon's work by hauling a load of bag cement a distance of 12 miles.

The car is also used on short hauls, which takes a two-horse team three and one-half hours to accomplish, this being done with the Autocar in 40 minutes, including loading, hauling, unloading and return. Smedley & Mehl say they purchased the car for long-haul work, and find the service of great value to them. In delivering coal to one of their customers, the residence being located at the top of a very steep grade, they formerly used four horses to haul a two-ton load up this hill. The Autocar carries the load up this grade with ease.

The Horse Vs. the Motor Truck.

John N. Willys, president of several motor truck companies, gave the following interview recently in New York:

"No one who has not taken the precaution of comparing the two methods has any conception of the wastefulness of the horse, as compared to the motor truck, in the transportation of merchandise. We have the horse habit so firmly fixed that even the most startling arguments against the equine have thus far failed to rout this expensive domestic animal. According to United States Government reports, a large majority of our three principal crops goes to feed the horse, while throughout the country the high cost of food products is working havoc. With the elimination of the horse, this vast amount of material could be utilized for human consumption and the cost of living be materially lessened.

"The hay crop of the United States for this year will amount to \$740,000,000. The horse eats nearly all of this. If horses were replaced by motor trucks, probably 90 per cent of the land now used for growing hay could be devoted to raising foodstuffs. And the high cost of living would take a drop. A total of \$334,000,000 worth of oats is raised annually in our country. The horse eats most of it. If this oat-raising land could be utilized,

there would be millions of bushels of potatoes and other foodstuffs raised.

"The corn crop this year is conservatively valued at \$2,000,000,000. The horse eats a very large part of this—another demonstration of criminal waste in the scheme for maintenance of human population. These three crops have a total value this year of \$3,074,000,000. A large part of this money goes for the feeding of 25,000,000 horses and mules. If we could even eliminate half of this total number of draft animals—and this could be accomplished by the use of motor trucks—there would be a saving of \$1,587,000,000, or an average of nearly \$18 for each of the 90,000,000 people in the United States. And \$18 added to the available living fund of each of our people would mean vastly improved living conditions for every one concerned."

The Auto Truck in Philadelphia.

The Packard interests recently issued a review of the large users of their trucks in Philadelphia. The Philadelphia branch says:

"Wanamaker's on December 1, 1909, put into commission a Packard three-ton truck. On December 8 of the same year they added another. Those trucks can be seen any day on the streets; both are running to-day. In July, 1910, the third three-ton Packard truck was added to the Wanamaker equipment and in February, 1912, a Packard two-ton truck was purchased by this firm. These four trucks are all running night and day, making two shifts every 24 hours, being running constantly almost, except the time they are being loaded. They are all in good condition and look fit for many more years' service.

"Lit Brothers now have four Packard trucks in their daily service, and on Monday they put on two more. The first one they bought in November, 1910. It was a three-ton truck and gave such good service that in April of this year, after testing the first one out for three years, they bought three two-ton trucks. The Barrett Manufacturing Company have three of our trucks in daily service, and one of their companies, the Werren-Ehret, also have one, making four altogether. The first of these trucks were put on the street in December, 1909, the others during 1910, and they are all doing as good service to-day as they did the first day they were put on the street.

"It is not generally known, but it is a fact, that a Philadelphia firm has the largest fleet of trucks of one make in one city in the world. They have 22 trucks running every day.

"They put their first one on the street in October, 1910, and they put their latest one out in October of this year. Now the Bell Telephone Company has three Packards, their first having been put in commission in July, 1911; the second in November, 1911; third in January of this year—all running sweetly every day.

"Baugh & Son Company, the big fertilizer concern,

have four Packards. They bought the first in January, this year. In March another; in April they added another to their lot, and in July the fourth was purchased. All are doing a full day's work to-day.

"Carey Brothers, wall paper manufacturers, have two Packards. The first they bought in October, 1910; the second in August, 1912. The Consolidated Beef Company bought their first Packard truck in June, 1911, and in April, 1913, they added the second."

Auto Fire Engines in India.

During the last five years the use of motor fire engines has been making considerable headway in India, according to Consul Edward J. Norton, stationed at Bombay, and apparatus of this kind is now to be found at Calcutta, Bombay, Madras, Delhi, Lucknow, Allahabad, Hyderabad, Rangoon, Bassein, and Moulmein. The Bombay fire brigade possesses 11 motor machines, all of British manufacture, and the last three of these have lately been delivered. They comprise a motor steam fire engine of 400 gallons per minute capacity, and two gasoline engines, each of a capacity of 450 gallons per minute, with arrangements for carrying a fire escape. These new machines are similar to others already in use, but with latest improvements. A motor engine of 400 gallons capacity per minute has also just been acquired by the Hyderabad fire brigade, and included in its equipment is a petroleum heater, by means of which steam can be maintained in the boiler of the engine in order to secure a quick turnout.

According to the census of March 10, 1911, there were 37,932 occupied houses and 7,784 unoccupied houses in Bombay. The houses erected within the past few years and those now in construction are being built with walls of brick or stone, but with absolutely no provision for rendering the structure fireproof or of slow-burning type. Bombay has, however, very few fires, as there were only 124 alarms during the fiscal year ended March 31, 1913. This relatively small number of fires reported from a city having a population of close upon 1,000,000 is due in a great measure to the density of the population in the section occupied by the lower classes. The average annual fire loss in Bombay for the past 11 years has not amounted to over \$350,000.

Motor Car in Forest Fire.

During the recent disastrous forest fires at the mouth of the Big Tejuanga, in California, a big truck owned by a highway contractor of Los Angeles was commanded by the fire fighters and did important service in carrying men and tools to the scene of the fire, which was finally conquered.

One morning the big truck was proceeding through the streets of San Fernando, carrying a four-ton load of crushed rock. Fire Chief Willis Roe, of San Fernando had just been asked to aid in fighting the fire

by the forest rangers and was seeking some means of getting his men and tools out to the woods.

He stopped the truck, ordered the driver to dump the load beside the road. Then he put 30 men, armed with axes, shovels and other implements, into the body and ordered the driver to run for the fire-swept woods. At Sunland the truck turned into some roads over which a motor vehicle had never been.

Through sand, over boulders and at times even plowing a way through the trackless brush as high as the driver's seat, the big machine pushed on. Often it sank nearly to the hubs in the soft ground. In places the truck mounted 8 to 12 per cent grades over going so soft the wheels sank inches below the surface.

After delivering its first load of men the truck went back for a second, and it got 60 men to the scene of fire in record time.

Motor Truck An Aid to Cleveland During Blizzard.

Cleveland's survival of the worst blizzard in its history and a food famine which menaced every resident of the city is a story of remarkable efficiency of the modern motor truck operating under conditions that were as dramatic as they were unprecedented.

While the city was buried under 22 inches of snow, with drifts five and six feet high in many principal streets, with miles of fallen telegraph poles and tangled masses of live wires, with traffic completely paralyzed, street cars abandoned and others marooning their passengers over night—under these conditions the motor trucks of the leading merchants and a few touring cars were the only vehicles able to buck the drifts and bore their way through the heavy blanket of snow. And nearly all vehicles that could move carried food.

Real heroism was displayed by many truck crews who kept their vehicles going on the third day of the storm. They were not working for the sake of business, but for humanity. Hundreds of people waded through snow waistdeep to reach the depots of the largest milk distributor in Cleveland, and then waited in line for hours to get the milk that was brought in on White 5-ton trucks from milk trains that were snowbound on the outskirts of the city.

While a majority of the merchants made no effort to deliver goods, the firms who operated motor trucks kept them working day and night. Milk was but one of the necessary supplies that ran critically low. Tons of bread spoiled in bakeries because it could not be moved. Thousands of Clevelanders, carrying market baskets, worked their way through deep snow to reach grocers, butchers and bakers. In 90 per cent of the stores the shelves were bare on the third and fourth days.

The W. P. Southworth Company and the Chandler & Rudd Company, the two largest grocery houses in the city, operating a total of 12 trucks, were able to make deliveries on a reduced schedule and within a certain radius of their stores, but hundreds of small retailers

in all parts of the city ran out of stock because the distributors had no delivery equipment to meet such an emergency.

A "Horse-Shoe Tread" for an Auto Tire.

The "Horseshoers' Journal" tells of an invention of a new tread for an automobile tire, which is studded with the shape of a horse's foot sole surface. A Detroit inventor has secured patent on such an idea and thus nature is being recognized as worth while considering.

"This inventor, whose name we know not," says the "Journal," "doubtless took his cue from seeing how firmly the bare unshod hoof can hold the horse safely. The frog, if allowed to come in contact with the most slippery pavement, offers security to footing because of its very shape permitting suction through the cleft. Besides its rubber-like properties is an agent of security. But the frog, unlike worn or polished rubber, will cling to the pavement, the weight of horse assisting, of course, toward such effect. Then the inventor no doubt considered that within the entire body of sole the hollow provided another decided suction process which assisted greatly in holding his footing."

Cities Want Road Congress.

Fifteen of the leading cities of the United States are engaged in an interesting race to capture the next American Road Congress, which combines the annual conventions of the American Highway Association and the American Automobile Association as well as exhibits of the largest machinery and material manufacturers and of the Federal government.

The cities contending for the next congress are New York, Chicago, Kansas City, Milwaukee, Minneapolis, Detroit, St. Louis, Atlanta, Ga.; Denver, Cincinnati, Peoria, Ill.; Rochester and Buffalo, N. Y.; Louisville and New Orleans.

The most recent American Road Congress was held at Detroit a month ago, where it was conservatively estimated that 3,500 delegates attended. The American Highway Association, which is the clearing house for the road movement in this country, has affiliated with it large good road organizations in the various States and all were represented.

Competition for the next year's congress is unusually keen, because it is realized that the city selected profits not merely in a commercial way, but receives the benefit of the impetus to good roads throughout the nearby territory. Detroit has put in a strong bid to be made the permanent home of the congress, but the directors feel that other sections of the country should have their chance.

New York sent representatives to Detroit to secure the next congress, but, while no decision has yet been reached, it is indicated that the race has narrowed down to Atlanta, Denver and New Orleans.

J. E. Pennybacker, general secretary of the American

Highway Association, as well as of the congress, has just returned from Atlanta, where he says the movement to obtain the next congress is gathering great strength. As statistician for the joint committee of Congress investigating Federal aid in the construction of post roads and for a similar committee in Canada, Mr. Pennybacker has had excellent opportunities for sizing up the road movement in North America and he admits that few communities are quite as enthusiastic as Atlanta.

Firm Changes Name.

A. C. Blackburn, vice president and general manager of the A-B-C. Storage & Van Company, of Kansas City, announces the change of name to the A-B-C. Warehouse Company.

Dr. Pyles

Colic and Distemper Cough and Fever Medicine is backed by \$150,000 Guarantee. You can't lose. Write

WILL J. GIESEY COMPANY,
P. O. Box 277. N. S. Pittsburgh, Pa.

Auburn Scenery Trucks



are used by the largest transfer companies all over the country. Built in all sizes from 16 to 38 feet. Spring or Dead Axle.

115 STYLES IN DRAYS.

AUBURN WAGON COMPANY

301 AUBURN STREET. MARTINSBURG, W. VA.

FAR SUPERIOR

"We bought the first piano moving truck you made, nine or ten years ago, and are still using it, together with four others we have purchased since then. During that time we have tried several trucks and find that your truck is far superior to any of them. Your trucks are the only ones we now use and we cannot recommend them too highly."

THE SHANK STORAGE CO., INDIANAPOLIS.



It is used by concerns who realize that the easiest way to make money is to save the cost of labor and to give the best service at the same time. It protects the piano. Nothing like it for going up or down stairs.

If you are interested in making more money on every piano you haul, send for free illustrated folder and see how easily you can do it.

THE W. T. SLEIGHT MFG. CO., 303 Wulsin Bldg., Indianapolis, Ind.

BRUISED KNEE, BOG SPAVIN, THOROUGHPIN, WIND PUFF, and similar blemishes are quickly reduced with

ABSORBINE

It is mild and pleasant to use—does not stain or leave a greasy residue. It is soothing, cooling, healing and powerfully penetrating, a true discutient and resolvent liniment—strengthening and invigorating to tired, lame muscles and tendons. Allays pain promptly and takes out soreness and inflammation.

Does not blister or remove the hair and horse can be used.

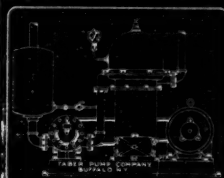
Use ABSORBINE to reduce swelling and inflammation, thickened tissues, fatty bunches, stop lameness, heal cuts, sores, chafes; to strengthen any part that needs it. Horse book free. \$2.00 a bottle at druggists or delivered.

W. F. Young, P. D. F.

146 Temple Street,

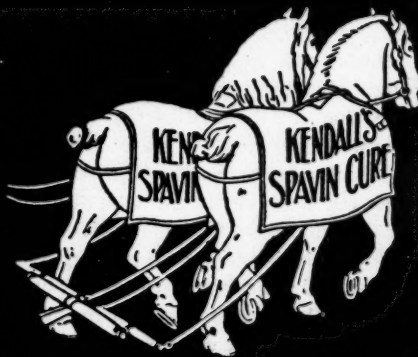
Springfield, Mass.

VACUUM HORSE GROOMING AND MASSAGE MACHINE



Cleanliness & Massage Are as good for a horse as for a man. This machine improves the health of the horse as well as enabling one man to do the work of several, reducing expense, and benefiting the horses. Sanitary, because it removes not only impurities, but germs. Profitable, because it saves you money. Send for particulars.

TABER PUMP COMPANY
BUFFALO, N. Y.



Lame Horses Put Back to Work Quick

Try Kendall's Spavin Cure. It has saved a great many horses—has put them back to work even after they had been given up. Over 35 years of success has proved the merit of

KENDALL'S Spavin Cure

It is the old reliable remedy for splint, spavin, curb, ringbone, thoroughpin, bony growths, swellings, sprains and lameness from many different causes.

Its cost is so small a matter, compared to the value of a horse that you cannot afford to be without it.

Sold by druggists everywhere. \$1.00 a bottle, 6 for \$5.00. Get a copy of "A Treatise on the Horse" at your druggists, or write.

Dr. B. J. Kendall Company,
Enosburg Falls, Vermont

Scores of Blue Ribbons

On the Grand Circuit

and at Eastern Fairs this Season were secured by trotters and pacers fed on Molassine Meal, and their drivers cannot say enough in praise of it as a feed.

Horses that were ill or off their feed were fed Molassine Meal and brought back in a few days to prime condition.

Breeders, Farmers, Truckmen, Contractors, unite in saying a good word for this feed, and you will now find

Molassine Meal

MADE IN ENGLAND

fed to horses owned by the leading Truckmen, Transportation Companies, Milk, Ice and Coal Companies, Mercantile Stores, Liveries and scores of City Department Stables.

Absolutely unlike anything else in the world; it is **not to be fed alone**, but is always fed with your regular ration, $\frac{1}{4}$ Molassine Meal, $\frac{3}{4}$ regular ration.

Look for this
Trade Mark
on every bag.



"MOLASSINE MEAL" is put up in bags containing 100 lbs. Ask your Dealer for it or write direct.

It is antiseptic. It enables every organ to do its best work; it keeps the digestive tract free and clear of worms; it aids digestion, and thus prevents colic and indigestion; will give your horses strength to do better work and more of it every day—it makes the coat sleek and glossy.

Write us for complete story of Molassine Meal, for our Horse Book and for the names of prominent breeders who have tested it.

MOLASSINE COMPANY
OF AMERICA

324 Board of Trade,

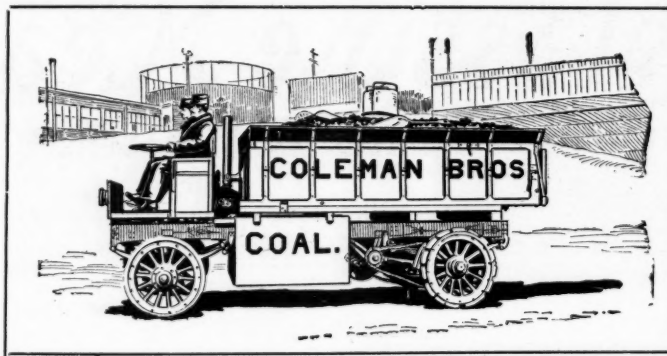
Boston, Mass.

St. John, Montreal, Toronto, Winnipeg.

SUCCESSFUL TRUCKING WITH G. V. ELECTRICS

Much significance is attached to the order given recently by the Public Works Commissioner of Boston, Mass., that every watering trough and drinking fountain be closed in order to prevent the spread of glanders, already evident in certain portions of the city.

Just what financial loss this disease has caused local horse owners has not been determined, but one finds food for thought in considering to what extent it could have been prevented by the use of the clean, silent and more cheaply operated electric truck.



Our persistent appeals to the hundreds of horse owners on behalf of the G. V. Electric have not been fruitless. Concerns like the one featured above are coming to realize that this unprofitable loyalty to the horse cannot go on much longer. One 5-ton G. V. Electric, well regulated and attended, will do twice as much work as a horse wagon of similar capacity and at less cost. Coleman Brothers saw this and lost no time in purchasing their second 5-ton G. V. No glanders trouble for them.

Can't we send you a copy of catalogue 79 and show you the short cuts to efficient and economic trucking?

General Vehicle Company, Inc.

General Office and Factory

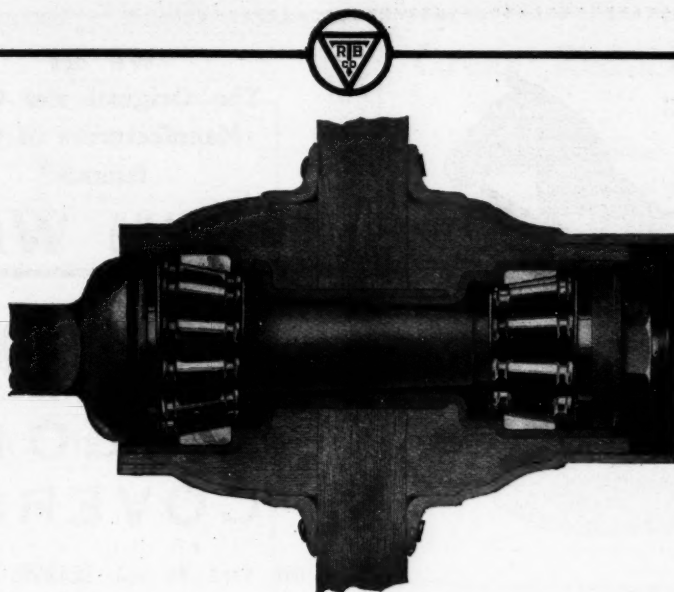
Long Island City, N. Y.

New York

Chicago

Boston

Philadelphia



Timken Roller Bearing Axles Save Money for the Wagon Owner

They cut the friction on the spindles of the wheels down so low that it almost vanishes. This reduces the draft from 25% to 50% and means that heavier loads can be hauled by the same horses; or, that it takes fewer horses to haul the same loads; or, that you can haul the same loads farther with the same number of horses; or, haul the same loads with smaller horses. Any of these save money for the wagon owner; and there are other savings.

Much less oil is required. By the use of Timken Roller Bearings we substitute rolling for sliding friction. The rollers roll over the surfaces of the "cone" and the "cup" of the bearing just as the wagon wheels roll over the ground instead of sliding over it. And with the same relative difference in amount of friction.

Because friction is almost nothing, wear is almost nothing too, and what little wear does come after thousands of miles of travel can be taken up in the bearings by a simple adjustment that makes them as efficient as when new.

Once a month is often enough to oil Timken Roller Bearing Axles. Besides saving oil this fact saves the barn man's time.

Hot boxes are impossible with their damage and their delays on the road. Greasy hubs are done away with. So is "chuck" that racks the vehicle.

Any wagon or carriage maker or blacksmith can put Timken Roller Bearing Axles on an old or a new wagon; special wheels or hubs are not required. The axles are fool proof and trouble proof, easily understood, require very little care and run without any of the noise of the ordinary type of axle.

The whole interesting story of Making Horse Haulage More Profitable is told in our booklet O-3. Write for it today. Sent free, postpaid, on request to



THE TIMKEN ROLLER BEARING CO.
CANTON, OHIO

New York Branch, 1999 Broadway
Chicago Branch, 1347 S. Michigan Ave.



502

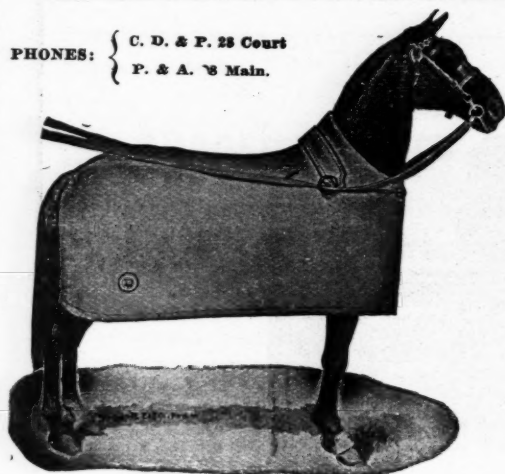
There is just one quality of Timken Bearings whether for wagons or motor cars.

TIMKEN

ROLLER BEARING AXLES

PLEASE MENTION THE TEAM OWNERS REVIEW, WHEN WRITING TO ADVERTISERS.

PHONES: { C. D. & P. 28 Court
P. & A. 8 Main.



We are
The Original and Only
Manufacturers of the
famous

STAG BRAND WATERPROOF

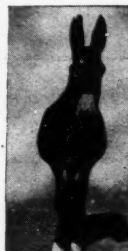
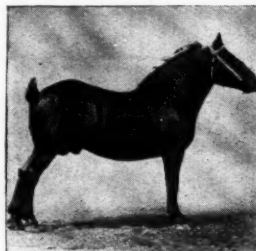
**HORSE
- - - AND - -
WAGON
COVERS.**

FOR SALE BY ALL LEADING SADDLERS
THROUGHOUT THE UNITED STATES.

Pittsburgh Waterproof Co.

435 Liberty Street, PITTSBURGH, PA.

"EXCELLO"
Way Does Save
Delay.



Reduces Ex-
pense by Dol-
lars and Cents.

EXCELLO

Mr. TEAMOWNER—Are all your teams looking like these fine fellows? If not, why not? What are you feeding them? These boys were fed on a PURE-CLEAN-Balanced ration feed, free from all By-products—

EXCELLO HORSE AND MULE FEED.

They are better able to stand the heavy work, and also look better than the straight OATS Fed Horses.

We would refer you to:

Michael Doyle, No. 18 South Delaware avenue.
C. J. McDermott, No. 121 North Fourth street.
Charles Gallen, No. 17 North Seventh street.
James Nolen, No. 607 Arch street.
all of Philadelphia, Pa., who are users of a High Grade, Up-to-Date,

Balanced Ration HORSE AND MULE FEED,

MANUFACTURED BY THE

EXCELLO FEED MILLING CO.

22nd and Garfield Avenue.

St. Joseph, Mo.



PLEASE MENTION THE TEAM OWNERS REVIEW, WHEN WRITING TO ADVERTISERS

A Horse Nail



The
"Capewell"
Nail
Always
Has
the
Check
Mark
on
the
Head
Our
Trade
Mark
Look
for
It.

is subjected to almost constant wear and tear—pound and jar—pull and twist.

Even while the horse stands in the stable simply stamping his feet there's much strain on the nails which hold his shoes.

Only the very best stock will endure such service. Only the strongest nail can be depended on.

The material used in making "Capewell" nails is specially selected—carefully tested—worked by the famous "Capewell" process and finally put under the keenest inspection.

Always Reliable

Nails made in this way can be relied on to hold a shoe. The horse owner has to pay for shoes lost. It pays him, therefore, to have "Capewell" nails used at all times—they bring the shoes home.

The reason—"Capewell" nails have half again the tensile strength of any other nail. Best in the world at a fair price—not cheapest regardless of quality. All shoers can afford to use "Capewell" nails.

Made by--

The Capewell Horse Nail Co.
Hartford, Conn., U. S. A.

LARGEST MAKERS OF HORSE NAILS IN THE WORLD.

Great Reduction in Prices

of

"Gillette" Horse Clipping Cutters

The "Gillette" Cutters Will Fit Any Make of Horse Clipping Machines on the Market.

Try a "Gillette" Cutter and be Convinced.



Guaranteed to do more and cleaner work than any cutters made. The cheapest horse-clipping cutter on the market. Send for circulars and get our reduced prices of cutters and parts. Also makers of the celebrated "Gillette" hand and electric power horse-clipping machines. Used all over the world for the last thirty years.

Gillette Clipping Machine Company.

110-112-114 West 42d St.,

New York, N. Y.

FOR SALE

**Eight Double Express Wagons in
Good Order.**

Box 100, Team Owners Review,
Pittsburgh, Pa.

Good Books for Team Owners

Modern Blacksmithing, Rational Horseshoeing and Wagon Making, by J. G. Holmstrom, cloth binding, 200 pages, illustrated, sent postpaid\$1.00

Scientific Horse, Mule and Ox Shoeing, by J. G. Holmstrom, cloth, standard work, sent postpaid\$1.00

McClure's American Horse, Cattle and Sheep Doctor, by Robert McClure, M. D. V. S., Professor Veterinary College, Philadelphia; 415 pages, fully illustrated, cloth, sent postpaid\$1.25

Gleason's Training Made Easy, by O. H. Gilson, V. S., cloth, sent postpaid 50c
Every team owner should study them.

These books can be had by writing The Team Owners Review, 417 Westinghouse building, Pittsburgh, Pa.

Enclose postal order, checks, cash, drafts or postage stamps, and these books will be mailed to your address.

Team Owners Review

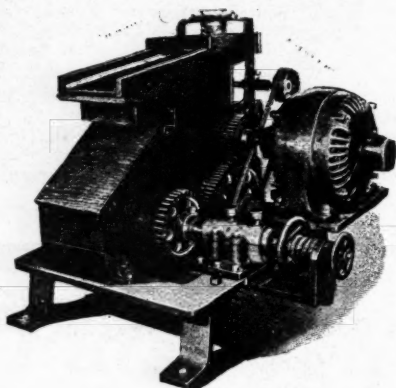
Westinghouse Bldg. Pittsburgh, Pa.

Get Full Value of the Oats You Feed

This can be done by crushing the oats in

THE BELL OAT AND CORN CRUSHER

When your horse is fed whole oats much of its food passes through the animal whole. This is a total loss.



Crushed oats and corn are readily digested. The animal thus fed receives full nutrition. The horse can do more and better work. Grain will not be wasted.

These facts cannot be controverted.

We Want to Convince Team Owners and make the following offer:

We will ship our crusher suitable for your purpose on a 30 day's trial, guaranteeing a saving in your feed bill 15 per cent.

Send for Our Catalogue No. 4. It Tells the Story Better.

The W. L. McCullough Co.

YPSILANTI, MICH.

W. D. QUIMBY, 79 Portland St., Boston, Mass, General Agent for New England States.



"Let's Give You a Lift"

Why handle your Pianos in the old, clumsy, cumbersome way, when

BREEN'S DERRICK

Will do it Better, Quicker, Cheaper

It is a device that is known to team owners all over the country, and all the wise ones use it. Write for our catalogue and let us tell you about it.

WILLIAM H. BREEN, 231 Rutherford Avenue, Boston, Mass.

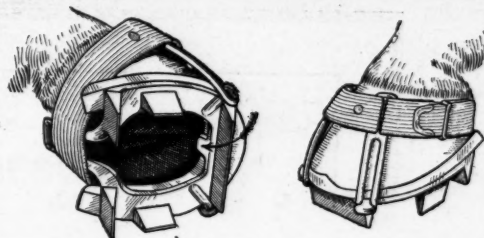
Warranted to Give Satisfaction.

**Gombault's
Caustic Balsam****Has Imitators But No Competitors.**

A Safe, Speedy and Positive Cure for
Curb, Splint, Sweeny, Capped Hock,
Strained Tendons, Founder, Wind
Puffs, and all lameness from Spavin,
Ringbone and other bony tumors.
Cures all skin diseases or Parasites,
Thrush, Diphtheria. Removes all
Bunches from Horses or Cattle.

As a Human Remedy for Rheumatism,
Sprains, Sore Throat, etc., it is invaluable.
Every bottle of Caustic Balsam sold is
warranted to give satisfaction. Price \$1.50
per bottle. Sold by druggists, or sent by ex-
press, charges paid, with full directions for
its use. Send for descriptive circulars,
testimonials, etc. Address

The Lawrence-Williams Co., Cleveland, O.



This new Sharp-shod Overshoe made of
malleable iron. Sells for \$3.00 per set, of four
shoes. Extra sharp-shod treads, 30 cents each.
They fill the bill for icy weather to the satisfac-
tion of the horse owner. Our third season on
the market and well indorsed by many users.

There is a good margin of profit for the
dealer.

We like your shoe because it can be fitted
quickly and does its work well.

(Signed) H. O. FULLEN, Chief Agt.,
Humane Society, Kansas City, Mo.

Send for circular and prices to

Herman Mfg. Co.

1420 Pennsylvania Ave.,

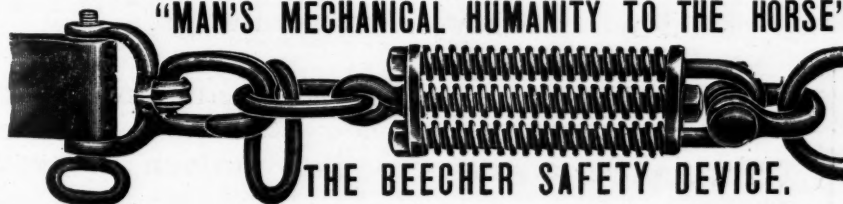
Washington, D. C.

Beecher Draft Spring Co.,

New Haven, Conn.

Write for Catalogue.

"MAN'S MECHANICAL HUMANITY TO THE HORSE"



THE BEECHER SAFETY DEVICE.

CONVENIENT, DURABLE,
PRACTICAL.

Manufacturers of Open Link, Rope Traces, and Lap Loop

St. Louis Transfer Company,

ST. LOUIS, MISSOURI,

Agents For All Railroads Terminating at East St. Louis and St. Louis.

GENERAL RECEIVERS AND FORWARDERS.

RECONSIGNMENT AND DISTRIBUTING AGENTS.

EXTENSIVE STORAGE WAREHOUSES.

BAGGAGE CHECKED FROM RESIDENCES AND HOTELS.

BAGGAGE AGENTS ON ALL INCOMING TRAINS.

General Offices: 400 SOUTH BROADWAY.

Baggage Office: 220 NORTH EIGHTH Street.

G. J. TANSEY, PRESIDENT AND GENERAL MANAGER.

PLEASE MENTION THE TEAM OWNERS REVIEW, WHEN WRITING TO ADVERTISERS.

If you are not a reader of the Industrial World

You are missing many an opportunity for getting New Business from the up-to-date information of new projects, contemplated improvements and additions which is published weekly in its columns.

The advance sheets of this information furnished advertisers has proven a service of unquestionable value.

Write for Sample Copy.

INDUSTRIAL WORLD
108 Smithfield St. Pittsburgh, Pa.



Transfer, Warehouse and Storage Companies' Directory



AKRON, O.

Eagle Storage & Coal Co.

DISTRIBUTING, CONTRACTING, MOVING.
MOVING AND STORING COAL.

Storage House, Lock 1 W. Exchange St.
Bell 2770 Office 30 W. State St. Peoples 2459

ALBANY, N. Y.

Security

Storage and Warehouse Co.

Natural Distributing Point for Eastern
New York and New England.

Storage, Forwarding, Re-Shipping.
105 MONTGOMERY ST.

ATLANTA, GA.

Morrow Transfer & Storage Co., STORAGE AND HAULING.

Members of A. W. A. and N. Y. F. W. A.
50-52 East Alabama Street.

BALTIMORE, MD.

ALBERT HAUSMAN

401 Penn Street,

MOVING, CARTING & STORAGE.

BOSTON, MASS.

"WE MOVE EVERYTHING"

R. S. Brine Transportation Co.

48 India Street.

Trucking, Forwarding and Rigging.

BROOKLYN, N. Y.

PIONEER WAREHOUSES.

41-43 Flatbush Ave.

BUFFALO, N. Y.

The Buffalo Storage & Carting Company.

Unsurpassed Facilities for Storing, Handling,
Transferring and Forwarding Goods.

BUFFALO, N. Y.

Niagara Carting Company

223 Chamber of Commerce.

GENERAL CARTAGE & STORAGE

Transferring Car Loads a Specialty.

BUFFALO, N. Y.

O. J. Glenn & Son

Everything in the Line of Moving,

Carting, Packing, Storage.

Office, 47 W. Swan Street.



CINCINNATI, OHIO.

Cincinnati Transfer Company,

58 MITCHELL BLDG.

Consignments of freight in car lots for distri-
bution at Cincinnati, solicited.

CANTON, OHIO.

Cummins Storage Company

310 East Ninth Street.

STORAGE, DRAYING, PACKING AND
FREIGHT HANDLING A SPECIALTY
Unsurpassed Facilities for Handling Pool Cars

CHICAGO, ILL.

Trans Continental Freight Co.

Forwarders of Household Goods, Machinery
and Automobiles.

Reduced Freight Rates to and from all prin-
cipal points west.

General Office, 203 South Dearborn Street,
New York Office, 29 Broadway.
Boston Office, 1004 Old South Building.

CHICAGO, ILL.

Bekins Household Shipping Co.

Reduced Rates on

Household Goods, Automobiles and
Machinery.

General Office, 38 So. Dearborn St. Chicago.
New York, 290 Broadway; Boston, 437 Old
South Building; Buffalo, 357 Ellicott Square;
Cincinnati, 62 Plymouth Building.

DAVENPORT, IOWA.

Schick's Express & Transfer Co.,

WAREHOUSE and STORAGE

111 Ripley Street.

DENVER, COL.

THE WEICKER TRANSFER AND STORAGE CO.

Office, 1033 Seventeenth Street.
New Fireproof Warehouse on Track
1447 to 51 Wynkoop Street.
Storage of Merchandise and Household Goods.
Distribution of Car Lots a Specialty.

DETROIT, MICH.

LEWIS TRUCK & STORAGE CO.

52-54 Bates Street

SAFES, MACHINERY AND
GENERAL TRUCKING

DES MOINES, IOWA.

Blue Line Transfer & Storage Company

General Storage, Carting, Packing & Shipping.
FIREPROOF WAREHOUSES

DES MOINES, IOWA.

Merchants Transfer & Storage Company

WAREHOUSEMEN AND FORWARDERS

General Offices - - - - - Union Station

DETROIT, MICH.

The Reading Truck Co.

Office and Warehouse, Sixth and Congress Sts.

GENERAL CARTAGE AGENTS,
For Wabash and Canadian Pacific Railways.

Superior Facilities for Hauling and
Erecting All Kinds of Machinery.

EL PASO, TEXAS.

WESTERN TRANSFER & STORAGE COMPANY

518 SAN FRANCISCO ST.

Forwarders and Distributors—Trucking of all
kinds—Distribution cars a specialty.
Warehouse on Track.

ERIE, PA.

The Erie Storage & Carting Company

Packers of Pianos and Household Goods,
Storage, Carting and Parcel Delivery.

Warehouse Siding, switching to all lines

EVANSVILLE, IND.

The Evansville Warehouse Co.

PETER GORTER

Transfer, Trucking and Storage.

FORT WAYNE, IND.

Brown Trucking Company

MOVING, CARTING, STORAGE
AND DISTRIBUTING

125 West Columbia Street.

PLEASE MENTION THE TEAM OWNERS REVIEW, WHEN WRITING TO ADVERTISERS.

TRANSFER, WAREHOUSE AND STORAGE COMPANIES' DIRECTORY — Continued.

FORT WORTH, TEXAS.
Binyon Transfer & Storage Company.

Front and Throckmorton Streets.
 Receivers and Forwarders of Merchandise.
 Furniture Stored, Packed and Moved.
 Hauling of Safes, Machinery and Freight a Specialty.
 Telephones 187.

GRAND RAPIDS, MICH.
RADCLIFFE & COMPANY,

TRANSFER AND STORAGE.
 South Division and Cherry Streets.

HARTFORD, CONN.
The Bill Brothers Company
 TRANSFER AND STORAGE

Special Facilities for Moving Machinery, Safes, Furniture, Pianos, etc. **STORAGE WAREHOUSES** with separate apartments for Household Goods, and Railroad Siding for Carload Shipments.

HASTINGS, NEBRASKA.

J. H. HOAGLAND

301 SECOND ST.
 Receivers and Forwarders of Freight.
 Storage Warehouses.

HELENA, MONT.
Benson, Carpenter & Co.

RECEIVERS & FORWARDERS
 Freight Transfer and Storage Warehouse.
 HANDLING "POOL" CARS A SPECIALTY.
 Trackage Facilities.

HOLYOKE, MASS.
The Sheldon Transfer Company
 Express Trucking,
 Heavy Teaming General Forwarders

HOUSTON, TEXAS.
WESTHEIMER
WAREHOUSE COMPANY
 STORAGE & DISTRIBUTING
 Fireproof Warehouses. Separate Locked Rooms

KANSAS CITY, MO.
Kansas City Transfer Co.,
 Fifth and Washington Sts.
 GENERAL FORWARDING AGENTS

LEOMINSTER, MASS.
W. K. MORSE
 LIGHT AND HEAVY TRUCKING
 OF ALL KINDS

Office and Stables, rear 83 Mechanic Street.
 Residence, 147 Whitney Street.

LIVERPOOL, ENGLAND
R. H. Morgan & Company, Ltd.,
 CUSTOM HOUSE BUILDING,
 Send Your European Shipments in
 our care.

LOS ANGELES, CAL.
Bekins Van & Storage Co.,
 140 South Broadway.

LOWELL, MASS.

Bay State Storage & Warehouse Company,
 334-360 Jackson Street.

MANSFIELD, OHIO.

COTTER
TRANSFER & STORAGE COMPANY
 GENERAL HAULING & STORAGE

MILWAUKEE, WIS.
Kinsella Transfer Company

617 Clinton Street
 WE MOVE EVERYTHING.
 ALL KINDS OF TEAMING

MINNEAPOLIS, MINN.
CAMERON'S
Transfer & Storage Company

708 Hennepin Avenue,
 Unsurpassed facilities for Storing, Handling,
 Transferring and Forwarding Merchandise and Household Goods.
 Fireproof Storage.

MONTREAL, CANADA.
CUNNINGHAM & WELLS,
 31 COMMON STREET.
 Storage, Transfer and Trucking Agents.

MONTREAL, CANADA.
Meldrum Brothers, Limited
 Cartage Contractors
 Established 1857
 Office 32 Wellington Street.
 Unexcelled facilities for the teaming of car load, steamship importations and heavy merchandise.

NEW HAVEN, CONN.
The Peck & Bishop Company,
 Offices—191 Orange St.—25 Union St.
 MOVERS OF FURNITURE, PIANOS, MACHINERY, SAFES, ETC.
 Transfer and Forward Merchandise.

NEW LONDON, CONN.
B. B. GARDNER, 18 BLACKHALL STREET
 PIANO AND FURNITURE
 PACKER, MOVER & SHIPPER
 Safe Mover—Freight and Baggage Transfer.
 STORAGE.

NEW YORK, N. Y.
The Meade Transfer Company
 General Freight Forwarders
 Transfer Agents of the
 Pennsylvania R. R. and Long Island R. R.
 Main Office, P. R. R. Pier, 1 N. E.

OIL CITY, PA.
Carnahan Transfer & Storage Company

STORAGE AND PACKING
 PIANO MOVING A SPECIALTY.

PHILADELPHIA, PA.
C. J. McDERMOTT
 DRAYMAN.
 Hauling of all Kinds Promptly Attended to.
 Both Prones 121 N. Fourth Street.

PITTSBURGH, PA.
Haugh & Keenan
Storage & Transfer Company,
 Center and Euclid, East End.

PITTSBURGH, PA.
W. A. Hoeveler Storage Co.
 General Office 1150 Penn Ave.
 Packers, Movers, Storers & Shippers of Works of Art, Furniture and Household Goods.

PITTSBURGH, PA.
Weber Express & Storage Co.
 4620 Henry Street
 Moving, Packing and Storing | GENERAL HAULING
 of Furniture and Pianos

PITTSBURGH, PA.
J. O'NEIL, EXPRESS AND STORAGE
 813 W. Diamond Street, Northside.
 Unsurpassed Facilities for Storing, Handling, Transferring and Forwarding Goods.

PITTSBURGH, PA.
UNION STORAGE CO.,
 Liberty and Second Ave.,
 GENERAL, COLD AND BONDED STORAGE
 TRANSFERRING AND FORWARDING.

PITTSBURGH, PA.
HOUSEHOLD STORAGE CO.
 3 Warehouses—18 Stories.
 Packing, Moving, Shipping.
 Separate Rooms; Large Vans.
 Office 925 S. Canal St., N. S.,
 Pittsburgh, Pa.

PORTLAND, MAINE.
Chase Transfer Company
 General Forwarding Agents
 Eastern Steamship Company, Maine Steamship Company, Grand Trunk Railway.
 Special attention to Carload Consignment.
 FRANKLIN WHARF.

PORTLAND, ORE.
Northwestern Transfer Co.
 64 and 66 Front Street
 GENERAL FORWARDING AGENTS
 Special Attention Given to Pool Cars

PLEASE MENTION THE TEAM OWNERS REVIEW, WHEN WRITING TO ADVERTISERS.

TRANSFER, WAREHOUSE AND STORAGE COMPANIES' DIRECTORY — Continued.

ROCHESTER, N. Y.
Rochester Carting Company.
 164 ANDREWS STREET.
 Movers of Pianos and Household Furniture.

SALT LAKE CITY, UTAH.
Redman Fireproof Storage Co.
 159 South Main Street.
 RECEIVERS AND FORWARDERS.

SCRANTON, PA.
G. W. Brown
 Office: Lackawanna and Cliff Streets.
DRAYMAN AND RIGGER
 Largest and Most Complete Warehouse in Northeastern Pennsylvania.
 Storing, Transferring and Forwarding.

ST. LOUIS, MO.
St. Louis Transfer Company
 400 SOUTH BROADWAY
 Agents for All Railroads Terminating at East St. Louis and St. Louis.

SEATTLE, WASH.
SCHWEITZER & NIVEN
 220 THIRD AVE.
 Storage, Forwarding, Heavy Hauling.

ST. LOUIS, MO.
Columbia Transfer Company
 Special attention given to the distribution of car load freight.
 Depots: St. Louis, Mo., and East St. Louis, Ill.

ST. PAUL, MINN.
Fidelity Storage & Transfer Company,
 RECEIVERS AND FORWARDERS.

TOLEDO, OHIO.
Depenthal Truck & Storage Co.,
 Moving, Storing, Shipping,
 General Hauling.
 Office: 106 Summit St.; 209, 211, 213 Williams St. Warehouse: 247-253 Morris St.

TORONTO, CANADA.
Lester Storage & Cartage Co.,
 365-369 Spadina Avenue.

YOUNGSTOWN, O.
H. L. YERIAN
 GENERAL CARTAGE AND STORAGE.
 FORWARDERS, DISTRIBUTORS, BAGGAGE DELIVERY.
 27 North Champion Street.

ARE YOU
 REPRESENTED
 IN
 THIS DIRECTORY?

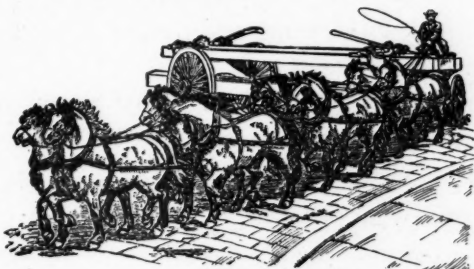
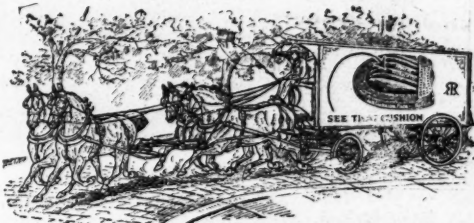
AIR CUSHION PADS

Rubber
Horse - Shoe



SEE THAT CUSHION?

made to meet all
HORSE
 conditions



No
 Lameness
 No
 Slipping

Write us



HEAVY HEEL, LEATHER BACK

Revere Rubber Co. Sole Mfrs. **Chelsea, Mass.**

Branches:

Boston.

New York.

Pittsburgh.

Chicago.

San Francisco.

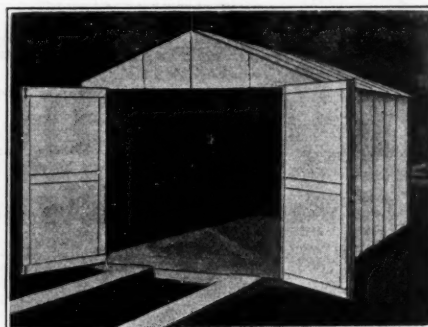
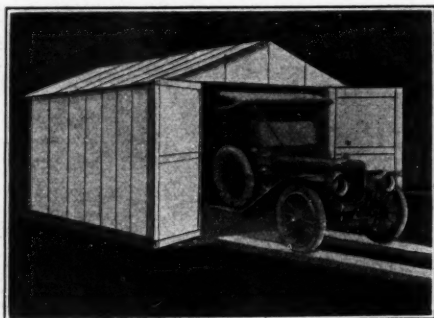
PLEASE MENTION THE TEAM OWNERS REVIEW, WHEN WRITING TO ADVERTISERS.

Keep Your Car in Your Own Garage

Own a Fireproof, Portable Building

These buildings are constructed without the use of hammer or nail—are put together with bolts and screws, and come all framed and fitted the proper size and marked, indicating position in the building in such a way that any inexperienced person can erect it in a short time.

The PORTABLE feature is such that the building can be taken down and re-erected in another location without destroying any part, and will be just as solid and substantial as ever.



We furnish the framing for two doors each 4 ft. wide and 8 ft. high, with bolts to put them together, also two windows (not glazed) with frame and hinges to swing. These can be placed in building as where desired.

WE DO NOT FURNISH FLOORS or foundation; the building may be set on concrete or wood posts and floors made of cinders, concrete or brick.

Net price list on regular sizes (f. o. b. Pittsburgh):

All buildings 8 ft. high to square, unless otherwise ordered.

| Steelcote | Width. | Length. | All Steel | Steelcote | Width. | Length. | All Steel |
|-----------|--------|----------|-----------|-----------|--------|----------|-----------|
| \$ 85.00 | 12 ft. | x 12 ft. | \$100.00 | 120.00 | 12 ft. | x 18 ft. | 135.00 |
| 95.00 | 12 ft. | x 14 ft. | 110.00 | 135.00 | 12 ft. | x 20 ft. | 145.00 |
| 110.00 | 12 ft. | x 16 ft. | 125.00 | 145.00 | 12 ft. | x 24 ft. | 160.00 |

MOTOR APPLIANCE COMPANY

417 Westinghouse Building,

Pittsburgh, Pa.

10 Automobile Mechanical Books 10

Engine — Magneto — Carburetor — Battery — Electric Lighting — Tires — Chassis
— Operation — Overhauling, Building and Repairing — The Motorcycle



A Library of Automobile Mechanical Information

800 Pages of Text—1,500 Illustrations—All Copies Fully Indexed.

Knowledge of your car means additional pleasure in its use and decreased cost in operation and maintenance. The practical instruction that you need is to be found in these books, and to acquire the same fund of information in any other manner would require years of constant study. No car or component is neglected, and all standard engines, magnetos, carburetors, batteries, lighting systems and vehicles are dealt with. The full set includes:

| | | | | | |
|---------------------------|-------|--------------------------|-------|-------------------------|-------|
| Engine | \$.35 | Motor Car Tires | \$.25 | Magneto | \$.35 |
| Carburetor | .35 | The Motor Car Chassis. . | .25 | Motor Car Operation... | .50 |
| Lighting by Electricity . | .50 | Motorcycle Construction, | | Overhauling, Rebuilding | |
| Battery | .35 | Care and Repair ... | .35 | and Repairing | .50 |

Full Set, 10 Books\$3.75

JUST COMPLETED AND READY FOR SALE

Motor Truck Construction, Care and Repair—Right up to the minute\$1.00

A B C of Aerial Navigation\$1.00

(Working Plans and Specifications of All Standard Models—American and Foreign Motors Described)

Team Owners Review

417 Westinghouse Bldg.

Pittsburgh, Pa.

THE TEAM OWNERS REVIEW

Team Owners and Drivers of City Business Horses Generally

Decide NOW
on the Shoes
and Calks You
will use in Next
Winter's Ice
and Snow



No. 4 Lock-Jaw
Draft Shoe, re-
cently added to
our list.

LOCK-JAW DRAFT SHOES WITH NEW LOCK-JAW "T"
CALKS ARE MADE ESPECIALLY FOR YOU.

| Nos. | 4 | 5 | 6 | 7 | 8 |
|----------------------|--------|--------|--------|--------|--------|
| Weight of each | 27 oz. | 31 oz. | 37 oz. | 40 oz. | 44 oz. |
| Number in Keg. | 59 | 51 | 43 | 41 | 36 |

All Lock-Jaw Draft Shoes are so shaped that they can readily be fixed to fit both front and hind feet.

All sizes (Nos. 4, 5, 6, 7, 8) are now made with clips without any increase in weight or price.

Lock-Jaw Draft Shoes, by reason of the greater toughness of the shoes and the longer life of Lock-Jaw Calks, give the longest wear. Because of the GREATER SHARPNESS of the calks, they give absolute protection to your horse.

The extraordinary success of Lock-Jaw Calks and Lock-Jaw Shoes, first put on the market last fall, proves one thing—THAT YOU OUGHT TO KNOW ABOUT THEM. Maybe you HAVE used them already, but whether you have or haven't we want to tell you about the new Lock-Jaw "T" Calk.

Lock-Jaw "T" Calks are different from any other calk manufactured. They are something BRAND NEW! They are made in the following sizes:

This shows how Lock-Jaw Calks are anchored in Lock-Jaw Shoes. Two blows on a cold punch will fill the soft metal of the shoe into the Key seat of the Lock-Jaw Calk.

The calk will never come out unless you wish to extract it. This can easily be done without injuring the shoe with the Lock-Jaw Extractor.



5-8



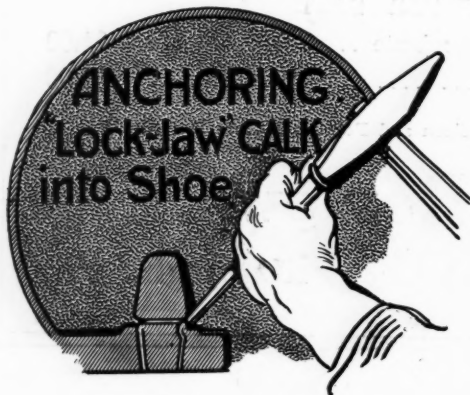
9-16



1-2



7-16



Look at the heavy central rib on these new "T" Calks. This rib does two things:

Gives additional wearing surface.

Makes the calks sharper and gives a surer footing for the horse. No advance in prices over our regular Lock-Jaw Calks.

Lock-Jaw Calks are the only calks that will never break in use. They will positively wear longer than any other calk. Our new method of regulating the heat of our furnaces enables us to guarantee this. Lock-Jaws will never fall out. See the illustration of the anchoring operation, and you will readily understand why.

KEY-CALK HORSESHOE MFG. CO.
GREEN BAY, WIS.

The Rowe Calk Co., Hartford, Conn., exclusive selling agents.

PLEASE MENTION THE TEAM OWNERS' REVIEW, WHEN WRITING TO ADVERTISERS.

